

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Muscatine Power and Water
Facility Location: 1700 Industrial Connector Road
Muscatine, Iowa 52761

Air Quality Operating Permit Number: 98-TV-021R1
Expiration Date: February 2, 2009

EIQ Number: 92-3726
Facility File Number: 70-01-011

Responsible Official

Name: Donald G. Pauken
Title: Manager, Environmental Affairs
Mailing Address: 3205 Cedar Street
PO Box 899
Muscatine, Iowa 52761-0899
Phone #: (563) 262-3394

Permit Contact Person for the Facility

Name: Donald G. Pauken
Title: Manager, Environmental Affairs
Mailing Address: 3205 Cedar Street
PO Box 899
Muscatine, Iowa 52761-0899
Phone #: (563) 262-3394

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	Actual cubic feet per minute
CE.....	control equipment
CEM.....	continuous emission monitor
CFR.....	Code of Federal Regulations
EIQ.....	Emissions inventory questionnaire
EP.....	emission point
EU.....	emission unit
°F.....	Degrees fahrenheit
gr./dscf.....	Grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
lb./hr.....	Pounds per hour
lb./MMBtu.....	Pounds per million British thermal units
MSI.....	Mineral Solutions Incorporated
MVAC.....	Motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS.....	New source performance standards
SCC.....	Source Classification Codes
SIC.....	Standard Industrial Classification
Ton/hr.....	Tons per hour
T-R.....	Transformer-Rectifier (Electrostatic Precipitators)
USEPA.....	United States Environmental Protection Agency
VMT.....	Vehicle Mile Traveled

Pollutants

PM.....	Particulate matter (equivalent to TSP, total suspended particles)
PM ₁₀	Particulate matter ten microns and less in diameter
SO ₂	Sulfur dioxide
SO _x	Sulfur oxides
NO _x	Nitrogen oxides
VOC.....	Volatile organic compounds
CO.....	Carbon monoxide
HAP.....	Hazardous air pollutants

I. Facility Description and Equipment List

Facility Name: Muscatine Power and Water

Permit Number: 98-TV-021R1

Facility Description: Electrical Generation (SIC 4911) and Potable Water Plant (SIC 4941)

Equipment List

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description	IDNR Construction Permit Number
15	15	Unleaded Gasoline Storage Tank Vent	N/A
21	20	Rail Hoppers A, B and C	93-A-288-S1
	21	Feeder Belt A	
	22	Feeder Belt B	
	23	Transfer Conveyor Load	
22	20	Rail Hoppers A, B and C	93-A-289-S1
	21	Feeder Belt A	
23	24	Transfer Conveyor Discharge	93-A-290-S1
	25	Radial Stacker Load	
	26	Radial Stacker Discharge	
24	27	Coal Pile	N/A
	27A	Coal Pile Bulldozing	
	342	G-Conveyor Discharge/Truck Loading and Unloading	
300	300	Barge Coal Unloader	N/A
301	305	Coal Reclaim/RC-1 Conveyor Load	80-A-193
	306	Reclaim Feeders	
302	301	Barge Unloader Discharge/UC-1 Conveyor Load	N/A
310	310	UC-1 Conveyor Discharge	93-A-285-S1
	311	RC-1 Conveyor Discharge	
310B	310B	Reclaim Feeder –2 Dis./Reclaim Conv.-2 Load	00-A-683
311	310	UC-1 Conveyor Discharge	80-A-194
	311	RC-1 Conveyor Discharge	
	312	Live Storage Coal Silo	
311B-1	311B	Reclaim Conv-2 Dis./LSCS-2 Load	00-A-684
311B-2	311B	Live Storage Coal Silo-2 (LSCS-2) Manway/Pressure Valve	00-A-685
312	313	Silo Feeder SF-1 through SF-4	93-A-286-S1

**Equipment List
(Continued)**

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description	IDNR Construction Permit Number
312B	312B	LSCS-2 Discharge/Silo Feeder-6 Load	00-A-686
313	317	Silo Feeder SF-5	80-A-195
	319	LSC-1 Conveyor Load	
313B	313B	Silo Feeder-6 Dis./Reclaim Conv. –3 Load	00-A-687
314	317	Silo Feeder SF-5	80-A-196
	318	EPC-1 Conveyor Load	
314B	314B	Reclaim Conv.-3 Disch. /EPC-1 Conv. Load	00-A-689
320	324A/325A	Unit 8A & 8B Coal Crushers	01-A-193
	329	Unit 8 Coal Crusher Feeders 8A & 8B	
322	320	EPC-1 Conveyor Discharge	80-A-006-S1
	322	K-Conveyor Discharge	
	323	Unit 7 Coal Crusher	
	326	7 & 8 Crshr. & Coal Bypass Chute Dis./L-Conv. Load	
	328	Unit 7 Coal Crusher & Bypass Feeder	
330	330	Truck Loading & Unloading Track Hopper A-Conveyor	N/A
330A			N/A
333	330A	Track Hopper Feeders A & B/A-Conveyor Load	80-A-007- S2
	331	A-Conveyor Discharge/C-Conveyor Load	
	333	C-Conv. Discharge/K-Conveyor Load	
	336	L-Conv. Discharge/E-Conv. Load	
341	340	E-Conveyor Disch./Unit 8 Coal Bunkers 8A, 8B & 8C	00-A-638
	342	G-Conveyor Discharge/Truck Loading & Unloading	
	343	E-Conveyor Discharge/F-Conveyor Load	
	344	F-Conv. Discharge/Unit 7 Coal Bunkers 7A & 7B	
350	350	LSC-1 Conv. Dis./SOC-1 & PC-1 Conv. Load/Surge Bins	80-A-192
351	350	LSC-1 Conv. Dis./SOC-1 & PC-1 Conv. Load/Surge Bins	93-A-284-S1
	351	Unit 9 9A & 9B Crushers	
	352	Unit 9 Crusher Feeders 9A & 9B	
	355	Unit 9 Crusher Disch./Surge Bin Discharge	
360	361	PSC-9 Conveyor	80-A-197

**Equipment List
(Continued)**

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description	IDNR Construction Permit Number
361	362	Coal Silo 9A	80-A-198
	363	Coal Silo 9B	
362	364	Coal Silo 9C	80-A-199
	365	Coal Silo 9D	
363	360	PC-1 Conveyor Discharge	93-A-287-S1
370	370	SOC-1 Conv. Discharge/RSC-1 Conveyor Load	93-A-283-S1
	372	RSC Conveyor-1 Discharge	
40	40	Limestone Hopper Loading	N/A
41	41	Limestone Conveying	80-A-202
	42	Limestone Crushing	
	43	Limestone Storage Silo 901	
	44	Limestone Storage Silo 902	
45	45	Limestone Storage Pile	N/A
	45A	Limestone Truck Unloading	
	45B	Limestone Haul Roads	
60	60	Auxiliary Boiler	80-A-191
70	70	Unit 7 Traveling Grate Stoker Boiler	74-A-175-S
80	80	Unit 8 Cyclone Boiler	95-A-373
810	CE810A/ CE810B	Filter/Separator Dust Collector DC-6A	00-A-639
811	812	Wet Fly Ash Truck Loading	N/A
813	810	Fly Ash Silo	N/A
814	810	Fly Ash Silo	01-A-218
	811	Dry Fly Ash Truck Loading	
90	90	Unit 9 Dry Bottom Tangential Fired Boiler	80-A-191
912A	911A	Reversing Conveyor-A Load	N/A
	912A	Reversing Conveyor-A Discharge	N/A
912B	911B	Reversing Conveyor-B Load	N/A
	912B	Reversing Conveyor-B Discharge	N/A
915A	915	Load Out Conveyor Load	N/A
915B			N/A
916B	916A	Load Out Conv. Disch/Radial Stacker Conveyor Load	N/A
	916B	Radial Stacker Conveyor Discharge	
919	919	Synthetic Gypsum Storage Pile	N/A
	919A	Synthetic Gypsum Truck Traffic	
	919B	Synthetic Gypsum Pile Formation	

**Equipment List
(Continued)**

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description	IDNR Construction Permit Number
920	920	Fly Ash Silo	80-A-201
920A	CE920	Cyclone Separator Dust Collector DC-13B	80-A-200
	924	Dry Fly Ash Temporary Storage – Truck Unloading	
920B	CE920	Cyclone Separator Dust Collector DC-13B	80-A-200
	924	Dry Fly Ash Temporary Storage – Truck Unloading	
921	921	Pug Mill A	N/A
922	922	Wet Fly Ash Truck	N/A
923	923	Fly Ash Truck	N/A
924	924	Dry Fly Ash Truck	N/A
860	860	Ash/Slag Storage Pile Wind Erosion	N/A
	860A	Ash/Slag Storage Pile Unpaved Roads	
	860B	Ash/Slag Storage Truck Loading	
	860C	Ash/Slag Storage Truck Unloading	
	860D	Ash/Slag Storage Pile Bulldozing	
925	924	Dry Fly Ash Temporary Storage – Truck Unloading	01-A-456
926	926A1	10-Ton Fly Ash Silo (MSI)	01-A-457-S2
927	927	Portable Diesel Tank (MSI) – Breathing Loss & Working Loss	01-A-458
928A	928A	Fly Ash Vacuum Pump Diesel Exhaust (MSI)	N/A
928B	928B	Fly Ash Blower Diesel Exhaust (MSI)	N/A
928C	928C	Portable Generator Diesel Exhaust (MSI)	N/A
929	924	Dry Fly Ash Truck	03-A-733
	926B	150-Ton Fly Ash Silo (MSI)	
990	990	Hydrated Lime Storage Silo	N/A
991	991	Hydrated Lime Mixing Tank	N/A
9060	9060	Stick Welding, 14 Welders	N/A
	9061	MIG Welding, 4 Welders	N/A
	9062	TIG Welding, 2 Welders	N/A
7890	7890	Portable Equipment Gasoline Engines (12 Engines)	N/A
7892	7892	Portable Equipment Diesel Engines	N/A

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
10	Fuel Oil Storage Tank 9A
11	Fuel Oil Storage Tank 9B
16	Used Oil Storage Tank (1,000 gal)
50	Emergency Generator (6.4 gal/hr, 227 hp power output)
820	Unit 8 Fire Protection System Diesel Engine Exhaust
821	Unit 8 Fire Protection System Diesel Storage Tank Vent
930	Unit 9 Fire Protection System Diesel Engine Exhaust
931	Unit 9 Fire Protection System Diesel Storage Tank Vent
910A	Vacuum Drum A Exhaust
910B	Vacuum Drum B Exhaust
926	Fly Ash Screw Conveyor B
927-1	Fly Ash Screw Conveyor Transfer
850	Used Solvent Reclamation System
880A	Drinking Water Treatment, Hydrogen Fluoride
880B	Drinking Water Treatment, Hydrogen Fluoride
880G	Drinking Water Treatment, Chlorine Gas
880H	Drinking Water Treatment, Chlorine Gas
1900	Unit 9 Waste Water Treatment Building, Chlorine Gas
1901	Unit 9 Waste Water Treatment Building, Chlorine Gas
1910	Unit 9 Waste Water Treatment Building, Sulfur Dioxide
1991	Unit 9 Waste Water Treatment Building, Sulfur Dioxide
928	Transport Screw Conveyor B
3014	Parts Washer, Material Handling Maintenance Building
7890	Portable Equipment – Gasoline Engines – Tank Vent
7892	Portable Equipment – Diesel Engines – Tank Vents
8030	Parts Washer, Units 7 and 8
9045	Parts Washer, Unit 9
9084	Parts Washer, Flue Gas Desulfurization Building
2010	Material Handling Used Oil Storage Tank Vent

II. Plant-Wide Conditions

Facility Name: Muscatine Power And Water

Permit Number: 98-TV-021R1

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years.

Commencing on: February 3, 2004

Ending on: February 2, 2009

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

SO₂: 500 parts per million

Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)¹:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

¹ This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

Particulate Matter (federally enforceable)²:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.

Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Muscatine Power And Water is in compliance with all applicable requirements and shall continue to comply with all such

² This is the current language in the Iowa SIP, and is enforceable by EPA.

requirements. For those applicable requirements which become effective during the permit term, Muscatine Power And Water shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

Agreements between IDNR and MP&W:

Muscatine Power and Water (MP&W) shall comply with all requirements of the PM LAER and offsets agreement signed by MP&W on 12/27/79 and signed by Iowa Department of Environmental Quality (IDEQ, the permitting authority at that time) and the revised SO₂ LAER and offsets agreement signed by MP&W on 12/7/82 and signed by IDEQ on 12/13/82 remain in effect.

Authority for Requirement: 567 IAC 22.108(1)

Section 112(j) of the Clean Air Act (MACT Hammer)

On 5/10/2002, Muscatine Power and Water submitted a Part 1 MACT application to IDNR indicating that the facility may be subject to the MACT standards for Reciprocal Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ, and Industrial/Commercial/Institutional Boilers, 40 CFR 63 Subpart DDDDD, when they are promulgated. Muscatine Power and Water must submit a Part 2 MACT application to IDNR by the deadline specified in 40 CFR 63.52(e), if 40 CFR 63 Subparts ZZZZ and DDDDD have not been promulgated by that date.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

III. Emission Point-Specific Conditions

Facility Name: Muscatine Power and Water

Permit Number: **98-TV-021R1**

Emission Point ID Number: 15

Associated Equipment

Associated Emission Unit ID Number: 15

Emission Unit vented through this Emission Point: 15

Emission Unit Description: Unleaded Gasoline Storage Tank Vent

Raw Material/Fuel: Unleaded Gasoline

Rated Capacity: 1000 Gallons

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

There are no emission limits at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 21

Associated Equipment

Associated Emission Unit ID Numbers: 20, 21, 22, and 23

Emissions Control Equipment ID Number: CE21 for all Emission Units

Emissions Control Equipment Description: Fabric Filter Dust Collector

Emissions Control Equipment ID Number: CE24 for Emission Units 21, 22, and 23

Emissions Control Equipment Description: Dust Suppression System

Emission Units vented through this Emission Point: 20

Emission Unit Description: Rail Hopper A, B and C

Raw Material/Fuel: Coal

Rated Capacity: 1400 Ton/hr

Emission Units vented through this Emission Point: 21

Emission Unit Description: Feeder Belt A

Raw Material/Fuel: Coal

Rated Capacity: 700 Ton/hr

Emission Units vented through this Emission Point: 22

Emission Unit Description: Feeder Belt B

Raw Material/Fuel: Coal

Rated Capacity: 700 Ton/hr

Emission Units vented through this Emission Point: 23

Emission Unit Description: Transfer Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 1400 Ton/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀
Emission Limit: 0.86 lb./hr ⁽¹⁾, 0.56 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 93-A-288-S1
⁽¹⁾ Combined total of all emission units on this emission point.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 1295 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-288-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-288-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 25.5

Stack Opening: 35 in. × 30 in.

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 37,816

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 93-A-288-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirement of O&M plan for this equipment: PM₁₀

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

AGENCY OPERATION & MAINTENANCE PLAN BAGHOUSE FOR PARTICULATE CONTROL

Facility:	Muscatine Power and Water
EQ Number:	92-3726
Emission Unit:	EU 20, 21, 22 and 23 Coal Handling Systems
Emission Point:	Exhaust vents from Dust Control Baghouse
Control Equipment:	CE21

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, will propose a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.

- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Daily Monitoring and Corrective Actions

- Inspect the differential pressure gauge for proper operation.
- The normal differential pressure is 2 –10 inches of water.

Weekly Monitoring and Corrective Actions

- Inspect dust collector hoppers for dust accumulation, clean as needed.

Monthly Monitoring and Corrective Actions (Operations)

- Inspect the compressed air pulsing system for any abnormal conditions.
- Manually run the dust collector conveying system and check for proper operation.
- Checks for opacity from the ductwork of the collection and exhaust system shall be observed on a monthly basis, using EPA test method 22 (40 CFR 60 Appendix A), to ensure that there are no visible emissions during the operation of the baghouse.

Inspections (Maintenance/Technical)

- All dust collector differential pressure gauges, and high hopper alarms will be checked on a monthly preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.
- All dust collector bags, self cleaning, and conveying systems will be checked on a 750- 1,000 hour of operation preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.

Record Keeping and Reporting

- All dust collector inspection, repair, and visible emissions records will be kept for at least five (5) years, and will be available for review upon request by an authorized regulatory agency.

Quality Control

(The following quality control measures will be implemented in association with the operation of the bag house)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturer's recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

AGENCY OPERATION & MAINTENANCE PLAN DUST SUPPRESSION SYSTEM FOR PARTICULATE CONTROL

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 21, 22 and 23 Coal Handling Systems
Emission Point:	Exhaust vents from Dust Control Baghouse
Control Equipment:	CE24

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Daily Monitoring and Corrective Actions

- Monitor dusting/coal moisture conditions, and apply suppressant as needed.
- Check dust suppression system alarm status, correct problem(s) or prepare a work request(s) as needed within 8 hours of identifying a problem.

Weekly Monitoring and Corrective Action

- Monitor dust suppressant drum/tank levels and refill before container becomes empty.

Record Keeping and Reporting

- All dust suppression system inspection and repair records and alarm logs will be kept for at least five (5) years, and will be available for review upon request by an authorized regulatory agency.

Quality Control

(The following quality control measures will be implemented in association with the operation of the Dust Suppression System)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturer's recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Emission Point ID Number: 22**Associated Equipment**

Associated Emission Unit ID Numbers: 20 and 21

Emissions Control Equipment ID Number: CE22 for Emission Units 20 and 21

Control Equipment Description: Fabric Filter Dust Collector

Emissions Control Equipment ID Number: CE24 for Emission Unit 21

Emissions Control Equipment Description: Dust Suppression System

Emission Units vented through this Emission Point: 20

Emission Unit Description: Rail Hoppers A, B and C

Raw Material/Fuel: Coal

Rated Capacity: 1400 Ton/hr

Emission Units vented through this Emission Point: 21

Emission Unit Description: Feeder Belt A

Raw Material/Fuel: Coal

Rated Capacity: 700 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit: 1.24 lb./hr ⁽¹⁾, 0.80 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 93-A-289-S1

⁽¹⁾ Combined total of all emission units on this emission point.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 1295 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-289-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-289-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 25.5

Stack Opening: 32 in. × 32 in.

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 32,661

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 93-A-289-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: PM₁₀

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

AGENCY OPERATION & MAINTENANCE PLAN BAGHOUSE FOR PARTICULATE CONTROL

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 20 and 21 Coal Handling Systems
Emission Point:	Exhaust vents from Dust Control Baghouse
Control Equipment:	CE22

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data

point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, will propose a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Daily Monitoring and Corrective Actions

- Inspect the differential pressure gauge for proper operation.
- The normal differential pressure is 2 –10 inches of water.

Weekly Monitoring and Corrective Actions

- Inspect dust collector hoppers for dust accumulation, clean as needed.

Monthly Monitoring and Corrective Actions (Operations)

- Inspect the compressed air pulsing system for any abnormal conditions.
- Manually run the dust collector conveying system and check for proper operation.

- Checks for opacity from the ductwork of the collection and exhaust system shall be observed on a monthly basis, using EPA test method 22 (40 CFR 60 Appendix A), to ensure that there are no visible emissions during the operation of the baghouse.

Inspections (Maintenance/Technical)

- All dust collector differential pressure gauges, and high hopper alarms will be checked on a monthly preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.
- All dust collector bags, self cleaning, and conveying systems will be checked on a 750- 1000 hour of operation preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.

Record Keeping and Reporting

- All dust collector inspection, repair, and visible emissions records will be kept for at least five (5) years, and will be available for review upon request by an authorized regulatory agency.

Quality Control

(The following quality control measures will be implemented in association with the operation of the bag house)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturer's recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Emission Point ID Number: 23**Associated Equipment**

Associated Emission Unit ID Numbers: 24, 25 and 26

Emissions Control Equipment ID Number: CE23

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 24

Emission Unit Description: Transfer Conveyor Discharge

Raw Material/Fuel: Coal

Rated Capacity: 1400 Ton/hr

Emission Units vented through this Emission Point: 25

Emission Unit Description: Radial Stacker Load

Raw Material/Fuel: Coal

Rated Capacity: 1400 Ton/hr

Emission Units vented through this Emission Point: 26

Emission Unit Description: Radial Stacker Discharge

Raw Material/Fuel: Coal

Rated Capacity: 1400 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit: 0.60 lb./hr ⁽¹⁾, 0.40 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 93-A-290-S1

⁽¹⁾ Combined total of all emission units on this emission point. All particulate is assumed to be PM₁₀.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 1295 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-290-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-290-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 19

Stack Opening (inches, dia.): 27 in.

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 15,600

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 93-A-290-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: PM₁₀

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

AGENCY OPERATION & MAINTENANCE PLAN BAGHOUSE FOR PARTICULATE CONTROL

Facility: Muscatine Power and Water

EIQ Number: 92-3726

Emission Unit: EU 24, 25 and 26 Coal Handling Systems

Emission Point: Exhaust vents from Dust Control Baghouse

Control Equipment: CE23

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data

point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, will propose a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Daily Monitoring and Corrective Actions

- Inspect the differential pressure gauge for proper operation.
- The normal differential pressure is 2 –10 inches of water.

Weekly Monitoring and Corrective Actions

- Inspect dust collector hoppers for dust accumulation, clean as needed.

Monthly Monitoring and Corrective Actions (Operations)

- Inspect the compressed air pulsing system for any abnormal conditions.
- Manually run the dust collector conveying system and check for proper operation.

- Checks for opacity from the ductwork of the collection and exhaust system shall be observed on a monthly basis, using EPA test method 22 (40 CFR 60 Appendix A), to ensure that there are no visible emissions during the operation of the baghouse.

Inspections (Maintenance/Technical)

- All dust collector differential pressure gauges, and high hopper alarms will be checked on a monthly preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.
- All dust collector bags, self cleaning, and conveying systems will be checked on a 750- 1 000 hour of operation preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.

Record Keeping and Reporting

- All dust collector inspection, repair, and visible emissions records will be kept for at least five (5) years, and will be available for review upon request by an authorized regulatory agency.

Quality Control

(The following quality control measures will be implemented in association with the operation of the bag house)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturer's recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Emission Point ID Number: 24 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 27, 27A and 342

Emission Units vented through this Emission Point: 27

Emission Unit Description: Coal Pile

Rated Capacity: 23 Acres

Emission Units vented through this Emission Point: 27A

Emission Unit Description: Coal Pile Bulldozing

Rated Capacity: Three Bulldozers

Emission Units vented through this Emission Point: 342

Emission Unit Description: G-Conveyor Discharge/Truck Loading and Unloading

Rated Capacity: 50 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity ⁽¹⁾

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

⁽¹⁾ Only EU 342 (G-Conveyer Truck Unloading) is subject to NSPS subpart Y.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 300 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Number: 300
Emissions Control Equipment ID Number: CE302
Control Equipment Description: Dust Suppression System

Emission Unit vented through this Emission Point: 300
Emission Unit Description: Barge Coal Unloader
Raw Material/Fuel: Coal
Rated Capacity: 1500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.
Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 301**Associated Equipment**

Associated Emission Unit ID Numbers: 305 & 306

Emissions Control Equipment ID Number: CE301

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 305

Emission Unit Description: Coal Reclaim/RC-1 Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 306

Emission Unit Description: Reclaim Feeders

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr./dscf combined total of all emission units on this
emission point.

Authority for Requirement: Iowa DNR Construction Permit 80-A-193

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

AGENCY OPERATION & MAINTENANCE PLAN BAGHOUSE FOR PARTICULATE CONTROL

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 305 and 306 Coal Handling Systems
Emission Point:	Exhaust vents from Dust Control Baghouse
Control Equipment:	CE301

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return

operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, will propose a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Daily Monitoring and Corrective Actions

- Review dust collector alarm status, correct problems or prepare a work request(s) as needed within 8 hours of problem identification.
- Log all alarm conditions and corrective action taken.

Weekly Monitoring and Corrective Actions

- Inspect dust collector hoppers for dust accumulation, clean as needed.

Monthly Monitoring and Corrective Actions (Operations)

- Inspect the differential pressure gauge for proper operation.

- The normal differential pressure is 2 –10 inches of water.
- Inspect the compressed air pulsing system for any abnormal conditions.
- Manually run the dust collector conveying system and check for proper operation.
- Replace burned out bulbs in dust collector broken bag detectors as needed.
- Checks for opacity in the ductwork of the collection and exhaust system shall be observed on a monthly basis, using EPA test method 22 (40 CFR 60 Appendix A), to ensure that there are no visible emissions during the operation of the baghouse.

Other

- If a broken bag detector fails, and cannot be repaired within 8 hours, emissions from the affected dust collector will be monitored on a weekly basis when the emission unit is at or near full capacity. EPA test method 9 (40 CFR 60 Appendix A), will be used to ensure that visible emissions do not exceed opacity emission standards during the operation of the baghouse.

Inspections (Maintenance/Technical)

- All dust collector broken bag detectors, photo cells, differential pressure gauges, and high hopper alarms will be checked on a monthly preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.
- All dust collector bags, self cleaning, and conveying systems will be checked on a 750- 1000 hour of operation preventative maintenance schedule. Preventative maintenance tasks work orders are generated by a computerized maintenance management system.

Record Keeping and Reporting

- All dust collector inspection, repair, and visible emissions records will be kept for at least five (5) years, and will be available for review upon request by an authorized regulatory agency.

Quality Control

(The following quality control measures will be implemented in association with the operation of the bag house)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturer's recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Emission Point ID Number: 302 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Number: 301

Emission Unit vented through this Emission Point: 301

Emission Unit Description: Barge Unloader Discharge/UC-1 Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 1500 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not

limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 310 (Vent Internally)**Associated Equipment**

Associated Emission Unit ID Numbers: 310 & 311

Emissions Control Equipment ID Number: CE310

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 310

Emission Unit Description: UC-1 Conveyor Discharge

Raw Material/Fuel: Coal

Rated Capacity: 1500 Ton/hr

Emission Units vented through this Emission Point: 311

Emission Unit Description: RC-1 Conveyor Discharge

Raw Material/Fuel: Coal

Rated Capacity: 1500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit: 0.15 lb./hr ⁽¹⁾, 0.30 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 93-A-285-S1

⁽¹⁾ Combined total of all emission units on this emission point.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 4,000 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-285-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-285-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 10

Discharge Style: This emission point shall vent inside the Coal Silo Building at all times.

Stack Opening (inches, dia.): 15

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 5,542

Authority for Requirement: Iowa DNR Construction Permit 93-A-285-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 310B (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 310B

Emission Units vented through this Emission Point: 310B

Emission Unit Description: Reclaim Feeder –2 Dis./Reclaim Conv.-2 Load

Raw Material/Fuel: Coal

Rated Capacity: 750 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-683

567 IAC 23.1(2)"v"

40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not

limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (acfm): NA

Stack Temperature (°F): NA

Discharge Style: Fugitive

Authority for Requirement: Iowa DNR Construction Permit 00-A-683

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 311**Associated Equipment**

Associated Emission Unit ID Numbers: 310, 311 & 312

Emissions Control Equipment ID Number: CE311

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 310

Emission Unit Description: UC-1 Conveyor Discharge

Raw Material/Fuel: Coal

Rated Capacity: 1500 Ton/hr

Emission Units vented through this Emission Point: 311

Emission Unit Description: RC-1 Conveyor Discharge

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 312

Emission Unit Description: Live Storage Coal Silo

Raw Material/Fuel: Coal

Rated Capacity: 1200 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf combined total for all emission units on this
emission point.

Authority for Requirement: Iowa DNR Construction Permit # 80-A-194

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"

40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation

attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 311B-1 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 311B

Emission Units vented through this Emission Point: 311B

Emission Unit Description: Reclaim Conv-2 Dis./LSCS-2 Load

Raw Material/Fuel: Coal

Rated Capacity: 750 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-684

567 IAC 23.1(2)"v"

40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being

used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (acfm): NA

Stack Temperature (°F): NA

Discharge Style: Fugitive

Authority for Requirement: Iowa DNR Construction Permit 00-A-684

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 311B-2 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 311B

Emission Units vented through this Emission Point: 311B

Emission Unit Description: Live Storage Coal Silo-2 (LSCS-2) Manway/Pressure Valve

Raw Material/Fuel: Coal

Rated Capacity: 750 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-685

567 IAC 23.1(2)"v"

40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being

used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (acfm): NA

Stack Temperature (°F): NA

Discharge Style: Fugitive

Authority for Requirement: Iowa DNR Construction Permit 00-A-685

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 312 (Vent Internally)**Associated Equipment**

Associated Emission Unit ID Numbers: 313

Emissions Control Equipment ID Number: CE312

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 313

Emission Unit Description: Silo Feeders SF-1 through SF-4

Raw Material/Fuel: Coal

Rated Capacity: 700 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit: 0.27 lb./hr ⁽¹⁾, 0.54 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 93-A-286-S1

⁽¹⁾ All particulate is assumed to be PM₁₀.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 4,000 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-286-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-286-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 17

Stack Opening (inches, dia.): 18

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 7,030

Discharge Style: This emission point shall vent inside the Coal Silo Building at all times

Authority for Requirement: Iowa DNR Construction Permit 93-A-286-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 312B (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 312B

Emission Units vented through this Emission Point: 312B

Emission Unit Description: LSCS-2 Discharge/Silo Feeder-6 Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-686

567 IAC 23.1(2)"v"

40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being

used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (acfm): NA

Stack Temperature (°F): NA

Discharge Style: Fugitive

Authority for Requirement: Iowa DNR Construction Permit 00-A-686

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 313**Associated Equipment**

Associated Emission Unit ID Numbers: 317 & 319

Emissions Control Equipment ID Number: CE313

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 317

Emission Unit Description: Silo Feeder SF-5

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 319

Emission Unit Description: LSC-1 Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf combined total for all emission units on this
emission point.

Authority for Requirement: Iowa DNR Construction Permit # 80-A-195

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 313B (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 313B

Emissions Control Equipment ID Number: CE310B

Control Equipment Description: Dust Suppression System

Emission Units vented through this Emission Point: 313B

Emission Unit Description: Silo Feeder-6 Dis./Reclaim Conv. -3 Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-687
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution

control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (acfm): NA

Stack Temperature (°F): NA

Discharge Style: Fugitive

Authority for Requirement: Iowa DNR Construction Permit 00-A-687

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 314**Associated Equipment**

Associated Emission Unit ID Numbers: 317 & 318

Emissions Control Equipment ID Number: CE314

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 317

Emission Unit Description: Silo Feeder SF-5

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 318

Emission Unit Description: EPC-1 Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf combined total for all emission units on this
emission point.

Authority for Requirement: Iowa DNR Construction Permit # 80-A-196

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 314B (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 314B

Emissions Control Equipment ID Number: CE310B

Control Equipment Description: Dust Suppression System

Emission Units vented through this Emission Point: 314B

Emission Unit Description: Reclaim Conv.-3 Disch. /EPC-1 Conv. Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-689
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution

control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (acfm): NA

Stack Temperature (°F): NA

Discharge Style: Fugitive

Authority for Requirement: Iowa DNR Construction Permit 00-A-689

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 320**Associated Equipment**

Associated Emission Unit ID Numbers: 324A, 325A, and 329

Emissions Control Equipment ID Number: CE320

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 324A/325A

Emission Unit Description: Unit 8A & 8B Coal Crushers

Raw Material/Fuel: Coal

Rated Capacity: 250 Ton/hr

Emission Units vented through this Emission Point: 329

Emission Unit Description: Unit 8 Coal Crusher Feeders 8A & 8B

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 01-A-193
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-193

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS 40 CFR 60 Subpart A and Y are applicable to the emission units covered under Iowa DNR Construction Permit 01-A-193

Authority for Requirement: Iowa DNR Construction Permit 01-A-193

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 14

Stack Opening (inches): Rectangular 24 × 24

Stack Exhaust Flow Rate (scfm): 11,300

Stack Temperature (°F): 80

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-193

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 322**Associated Equipment**

Associated Emission Unit ID Numbers: 320, 322, 323, 326, & 328
Emissions Control Equipment ID Number: CE322 for All Emission Units
Control Equipment Description: Fabric Filter Dust Collector
Emissions Control Equipment ID Number: CE321A for EU 326
Control Equipment Description: Dust Suppression

Emission Units vented through this Emission Point: 320
Emission Units Description: EPC-1 Conveyor Discharge
Raw Material/Fuel: Coal
Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 322
Emission Units Description: K-Conveyor Discharge
Raw Material/Fuel: Coal
Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 323
Emission Units Description: Unit 7 Coal Crusher
Raw Material/Fuel: Coal
Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 326
Emission Units Description: 7 & 8 Crshr. & Coal Bypass Chute Dis./L-Conv. Load
Raw Material/Fuel: Coal
Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 328
Emission Units Description: Unit 7 Coal Crusher & Bypass Feeder
Raw Material/Fuel: Coal
Rated Capacity: 200 Ton/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 80-A-006-S1
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 80-A-006-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS 40 CFR 60 Subpart A and Y are applicable to the emission units covered under Iowa DNR Construction Permit 80-A-006-S1.

Authority for Requirement: Iowa DNR Construction Permit 80-A-006-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 102

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 10,600

Stack Temperature (°F): 76

Discharge Style: Vertical without rain cap

Authority for Requirement: Iowa DNR Construction Permit 80-A-006-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Stack Testing:

Pollutant – PM

Stack Test to be Completed by - February 2, 2006

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 330 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Number: 330

Emission Units vented through this Emission Point: 330

Emission Unit Description: Truck Loading & Unloading Track Hopper A-Conveyor

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not

limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 330A (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 330

Emission Unit vented through this Emission Point: 330

Emission Unit Description: Truck Loading & Unloading Track Hopper A-Conveyor

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not

limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 333

Associated Equipment

Associated Emission Unit ID Numbers: 330A, 331, 333 & 336

Emissions Control Equipment ID Number: CE333

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 330A

Emission Unit Description: Track Hopper Feeders A & B/A-Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 210 Ton/hr

Emission Units vented through this Emission Point: 331

Emission Unit Description: A-Conveyor Discharge/C-Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 333

Emission Unit Description: C-Conv. Discharge/K-Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 336

Emission Unit Description: L-Conv. Discharge/E-Conv. Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 80-A-007-S2
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the

corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf expressed as the average of 3 runs.

Authority for Requirement: Iowa DNR Construction Permit 80-A-007-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS 40 CFR 60 Subpart A and Y are applicable to the emission units covered under Iowa DNR Construction Permit 80-A-007-S2.

Authority for Requirement: Iowa DNR Construction Permit 80-A-007-S2

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 49.5

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 9,500

Stack Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 80-A-007-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Stack Testing:

Pollutant – Opacity

Stack Test to be Completed by – 90 days after the issuance of IDNR Construction Permit 80-A-007-S2 which was issued on March 26, 2003.

Test Method – 40 CFR 60, Appendix A, Method 9.

Authority for Requirement – Iowa DNR Construction Permit 80-A-007-S2

Pollutant – Particulate Matter

Stack Test to be Completed by ^(*) – 90 days after the issuance of IDNR Construction Permit 80-A-007-S2 which was issued on March 26, 2003.

Test Method – Iowa Compliance Sampling Manual Method 5.

Authority for Requirement – Iowa DNR Construction Permit 80-A-007-S2

^(*) This test will satisfy the Title V monitoring testing requirements.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 341**Associated Equipment**

Associated Emission Unit ID Numbers: 340, 342, 343, & 344

Emissions Control Equipment ID Number: CE341

Control Equipment Description: Dust Collector

Emission Units vented through this Emission Point: 340

Emission Unit Description: E-Conveyor Disch./Unit 8 Coal Bunkers 8A, 8B & 8C

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 342

Emission Unit Description: G-Conveyor Discharge/Truck Loading & Unloading

Raw Material/Fuel: Coal

Rated Capacity: 50 Ton/hr

Emission Units vented through this Emission Point: 343

Emission Unit Description: E-Conveyor Discharge/F-Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Emission Units vented through this Emission Point: 344

Emission Unit Description: F-Conv. Discharge/Unit 7 Coal Bunkers 7A & 7B

Raw Material/Fuel: Coal

Rated Capacity: 200 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 00-A-638
567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 00-A-638

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS 40 CFR 60 Subpart A and Y are applicable to the emission units covered under Iowa DNR Construction Permit 00-A-638.

Authority for Requirement: Iowa DNR Construction Permit 00-A-638

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 130.25

Stack Diameter (inches): 22

Stack Exhaust Flow Rate (scfm): 7,533

Stack Temperature (°F): 94

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 00-A-638

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 350**Associated Equipment**

Associated Emission Unit ID Numbers: 350
Emissions Control Equipment ID Number: CE350
Control Equipment Description: Fabric Filter Dust Collector
Emissions Control Equipment ID Number: CE352
Control Equipment Description: Dust Suppression

Emission Units vented through this Emission Point: 350
Emission Unit Description: LSC-1 Conv. Dis./SOC-1 & PC-1 Conv. Load/Surge Bins
Raw Material/Fuel: Coal
Rated Capacity: 500 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)
LAER Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit # 80-A-192

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not

limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

With the exception listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Exception:

IDNR construction permit 80-A-192 (issued on 11/21/1980 for EP 350) permitted baghouse DC-1 for all emission units in the Unit 9 Crusher House. A second baghouse (DC-11) for the Unit 9 Crusher House was permitted by IDNR construction permit 93-A-284 (issued on 7/28/93) and its revision 93-A-284-S1 (issued on 7/15/95) for EP 351. Therefore, Unit 9 Crusher House has currently two baghouses with two individual emission points. This changed the associations between the emission units in the Unit 9 crusher house and the emission points. The process capacity was also increased at the time of the installation of baghouse DC-11. However, the IDNR construction permit 80-A-192 was not revised to reflect the changed conditions. The facility is required to revise IDNR construction permit 80-A-192 to reflect the current emission unit number, name and description, process capacity, control equipment, and other related information.

Condition:

The MP&W shall apply for a construction permit modification for IDNR construction permit 80-A-192 from the Iowa Department of Natural Resources within three (3) months of the issuance date of this permit renewal. The modification application should reflect the current conditions of emission point EP-350 and its associated emission unit(s). This emission point will be in compliance at the time the modified construction permit for IDNR construction permit 80-A-192 (EP 350) is issued.

Authority for Requirement: 567 IAC 22.108(15), 567 IAC 22.105(2)"h"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 351 (Vent Internally)**Associated Equipment**

Associated Emission Unit ID Numbers: 350, 351, 352 and 355
Emissions Control Equipment ID Number: CE351
Control Equipment Description: Fabric Filter Dust Collector
Emissions Control Equipment ID Number: CE352 for EU 350
Control Equipment Description: Dust Suppression System

Emission Units vented through this Emission Point: 350
Emission Unit Description: LSC-1 Conv. Dis./SOC-1 & PC-1 Conv. Load/Surge Bins
Raw Material/Fuel: Coal
Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 351
Emission Unit Description: Unit 9 9A & 9B Crushers
Raw Material/Fuel: Coal
Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 352
Emission Unit Description: Unit 9 Crusher Feeders 9A & 9B
Raw Material/Fuel: Coal
Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 355
Emission Unit Description: Unit 9 Crusher Disch./Surge Bin Discharge
Raw Material/Fuel: Coal
Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀
Emission Limit: 0.20 lb./hr ⁽¹⁾, 0.40 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 93-A-284-S1
⁽¹⁾ Combined total of all emission units on this emission point.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 4000 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-284-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-284-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 10

Discharge Style: This emission point shall vent inside the Crusher House Building at all times.

Stack Opening (inches, dia.): 26.

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 11,362

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Authority for Requirement: Iowa DNR Construction Permit 93-A-284-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 360**Associated Equipment**

Associated Emission Unit ID Numbers: 361

Emissions Control Equipment ID Number: CE360

Control Equipment Description: Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: 361

Emission Unit Description: PSC-9 Conveyor

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit # 80-A-197

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this

facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 361**Associated Equipment**

Associated Emission Unit ID Numbers: 362 & 363

Emissions Control Equipment ID Number: CE361

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 362

Emission Unit Description: Coal Silo 9A

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 363

Emission Unit Description: Coal Silo 9B

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf combined total for all emission units on this
emission point.

Authority for Requirement: Iowa DNR Construction Permit # 80-A-198

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 362**Associated Equipment**

Associated Emission Unit ID Numbers: 364 & 365

Emissions Control Equipment ID Number: CE362

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 364

Emission Unit Description: Coal Silo 9C

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Emission Units vented through this Emission Point: 365

Emission Unit Description: Coal Silo 9D

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf combined total for all emission units on this
emission point.

Authority for Requirement: Iowa DNR Construction Permit # 80-A-199

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 363**Associated Equipment**

Associated Emission Unit ID Number: 360

Emissions Control Equipment ID Number: CE363

Control Equipment Description: Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: 360

Emission Unit Description: PC-1 Conveyor Discharge

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: PM₁₀

Emission Limit: 0.28 lb./hr ⁽¹⁾, 0.35 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 93-A-287-S1

⁽¹⁾ Combined total of all emission units on this emission point.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 2500 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-287-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-287-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Additional Limits Due to Ambient Air Assessment

This emission point shall conform to the conditions listed below.

Stack Height (feet): 154.33

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 5,956

Stack Temperature (°F): 70 °F

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 93-A-287-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

Within six (6) months of the issuance date of this permit renewal, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 370 (Vent Internally)**Associated Equipment**

Associated Emission Unit ID Numbers: 370 and 372

Emissions Control Equipment ID Number: CE370

Control Equipment Description: Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: 370

Emission Unit Description: SOC-1 Conv. Discharge/RSC-1 Conveyor Load

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Emission Unit vented through this Emission Point: 372

Emission Unit Description: RSC Conveyor-1 Discharge

Raw Material/Fuel: Coal

Rated Capacity: 500 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit: 0.54 lb./hr ⁽¹⁾, 1.08 ton/yr ⁽¹⁾, 0.01 gr/scf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 93-A-283-S1

⁽¹⁾ Combined total of all emission units on this emission point.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of Operations:

1. This emission point shall not be operated for more than 4000 hours per year based on a twelve (12) month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 93-A-283-S1

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The owner shall maintain a record of periods of startup, shutdown or malfunction.
2. Hours of operation shall be kept on a weekly basis, averaged monthly, and also on a twelve month rolling average.

Authority for Requirement: Iowa DNR Construction Permit 93-A-283-S1

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60 Subpart Y

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft, from the ground): 45

Stack Opening (inches, dia.): 25

Exhaust Temperature (°F): 70 °F

Exhaust Flowrate (scfm): 12,525

Discharge Style: This emission point shall vent inside the Coal Silo Building at all times.

Authority for Requirement: Iowa DNR Construction Permit 93-A-283-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 40 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Number: 40

Emission Unit vented through this Emission Point: 40
Emission Unit Description: Limestone Hopper Loading
Raw Material/Fuel: Limestone
Rated Capacity: 400 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 41**Associated Equipment**

Associated Emission Unit ID Numbers: 41, 42, 43 & 44

Emissions Control Equipment ID Number: CE40

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Points: 41

Emission Unit Description: Limestone Conveying

Raw Material/Fuel: Limestone

Rated Capacity: 400 Ton/hr

Emission Units vented through this Emission Points: 42

Emission Unit Description: Limestone Crusher

Raw Material/Fuel: Limestone

Rated Capacity: 400 Ton/hr

Emission Units vented through this Emission Points: 43

Emission Unit Description: Limestone Storage Silo 901

Raw Material/Fuel: Limestone

Rated Capacity: 400 Ton/hr

Emission Units vented through this Emission Points: 44

Emission Unit Description: Limestone Storage Silo 902

Raw Material/Fuel: Limestone

Rated Capacity: 400 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.01 gr/dscf combined total for all emission units on this emission point.

Authority for Requirement: Iowa DNR Construction Permit 80-A-202

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter (PM)

Stack Test to be completed by – February 2, 2006

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement - 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 45 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 45, 45A & 45B

Emission Units vented through this Emission Point: 45

Emission Unit Description: Limestone Storage Pile

Raw Material/Fuel: Limestone

Rated Capacity: 2 Acres

Emission Units vented through this Emission Point: 45A

Emission Unit Description: Limestone Truck Unloading

Raw Material/Fuel: Limestone

Rated Capacity: 400 Tons/hr

Emission Units vented through this Emission Point: 45B

Emission Unit Description: Limestone Haul Roads

Raw Material/Fuel: Limestone

Rated Capacity: 5256 VMT/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 60**Associated Equipment**

Associated Emission Unit ID Number: 60

Emission Unit vented through this Emission Point: 60

Emission Unit Description: Auxiliary Boiler

Raw Material/Fuel: Fuel Oil, Natural Gas and LP gas

Rated Capacity: 3 MMBtu/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.03 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 80-A-191

Pollutant: SO₂

LAER Emission Limit(s): 0.44 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 80-A-191

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The MP&W shall not allow, cause or permit the combustion of fuel oil exceeding a sulfur content of 0.43 percent by weight.

Authority for Requirement: 567 IAC 22.108(3)"b"

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 70**Associated Equipment**

Associated Emission Unit ID Numbers: 70

Emissions Control Equipment ID Numbers: CE71 and CE72

Emissions Control Equipment Descriptions: Cyclone Separator and ESP

Continuous Emissions Monitors ID Numbers: ME70A, ME71, ME73 and ME74

Emission Unit vented through this Emission Point: 70

Emission Unit Description: Unit 7 Traveling Grate Stoker Boiler

Raw Material/Fuel: Bituminous Coal, Subbituminous Coal, and/or Natural Gas

Rated Capacity: 289 MMBtu/hr

15.32 Ton/hr Bituminous Coal

18.06 Ton/hr Subbituminous Coal

289 MMBtu/hr Natural Gas

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limits: 121 lb/hr, 0.42 lb/MMBtu, 530 tpy

Authority for Requirement: Iowa DNR Construction Permit 74-A-175-S

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 6 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 74-A-175-S

Pollutant: Sulfur Dioxide (SO₂) for boilers 7 and 8.

Emission Limits: 2772 lb/hr, 12,141 tpy.

The combined total emission of sulfur dioxide from boiler 7 and boiler 8 shall not exceed 2772 pounds per hour, averaged over a 24-hour calendar day. The combined total emission of sulfur dioxide from boiler 7 and boiler 8 shall not exceed 12,141 tons per year.

Authority for Requirement: Iowa DNR Construction Permits 74-A-175-S and 95-A-373

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below:

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The combined SO₂ emissions in pounds per hour from boilers 7 and 8 averaged over a 24-hour calendar day.
2. The combined SO₂ emissions in tons per calendar year from boilers 7 and 8.

Authority for Requirement: 567 IAC 22.108(3) (Iowa DNR construction permits 74-A-175-S and 95-A-373.)

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 220

Stack Diameter (inches): 106

Stack Exhaust Flow Rate (acfm): 143,410

Stack Temperature (°F): 358

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 74-A-175-S

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (PM)

1st Stack Test to be Completed by – February 2, 2005

2nd Stack Test to be Completed between – August 2, 2006 and August 2, 2007

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test. Results of the test shall be submitted

in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Continuous Emissions Monitoring:

Pollutant - Opacity

Operational Specifications - 40 CFR Part 60

Initial System Calibration/Quality Assurance –July 2000

Ongoing System Calibration/Quality Assurance - 40 CFR Part 60

Reporting & Record keeping - 567 IAC 25. Submit all reports and petitions required by 567 IAC 25 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring and the 40% opacity (visible emissions) limit

Authority for Requirement - 567 IAC 25.1(1), 567 IAC 23.3(2)"d",
567 IAC 22.108(4), and 567 IAC 22.108(15)

Pollutant - Sulfur Dioxide (SO₂)

Operational Specifications – As found in 40 CFR Part 75

Initial System Calibration/Quality Assurance – 11/29 –12/14/95

Ongoing System Calibration/Quality Assurance –As found in 40 CFR Part 75

Reporting & Record keeping – As found in 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with the 6 lb/MMBtu SO₂ emission limit for boiler 7 alone and 2772 lb/hr SO₂ emissions for boilers 7 and 8.

Authority for Requirement - Iowa DNR Construction Permit 74-A-175-S and
EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Other Parameters (For the calculation of SO₂)

Pollutant - Other - Carbon Dioxide (CO₂)

Operational Specifications – As found in 40 CFR Part 75

Initial System Calibration/Quality Assurance – 11/29-12/14/95

Ongoing System Calibration/Quality Assurance –As found in 40 CFR Part 75

Reporting & Record keeping – As found in 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with the 6 lb/MMBtu SO₂ emission limit for boiler 7 alone and 2772 lb/hr SO₂ emissions for boilers 7 and 8.

Authority for Requirement - Iowa DNR Construction Permit 74-A-175-S and
EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Pollutant - Other - Flow

Operational Specifications – As found in 40 CFR Part 75

Initial System Calibration/Quality Assurance – 11/29-12/14/95

Ongoing System Calibration/Quality Assurance –As found in 40 CFR Part 75

Reporting & Record keeping – As found in 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with the 6 lb/MMBtu SO₂ emission limit for boiler 7 alone and 2772 lb/hr SO₂ emissions for boilers 7 and 8.

Authority for Requirement - Iowa DNR Construction Permit 74-A-175-S and

EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Electrostatic Precipitator and Cyclone Agency Operation & Maintenance Plans

This Operations and Maintenance (O&M) Plan pertains to the electrostatic precipitator and cyclone that service coal/gas fired boiler 7.

Electrostatic Precipitator Operation & Maintenance Plan

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 70, Spreader Stoker Boiler
Emission Point:	EP 70, Boiler Stack
Control Equipment:	CE72

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.

- A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
- In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Prestart-up Practices

- Operations personnel assure that all access doors have been sealed, and that all "Kirk Keys" have been returned to their respective T-R cabinet.
- Perform air load tests on all T-R sets. The manufacturers established, incremental loading, and trip testing procedure for each T-R set is used.

Start-up Practices

(The following ESP start-up procedures shall be used as part of equipment re-start Activities)

- Assure all insulator heaters and pressurizing fans have been returned to operating status.
- Assure the rapper and vibrator systems have been energized.
- When the boiler exit gas has maintained 240 °F for a period of two hours, in a manner consistent with good practice for minimizing emissions, energize the precipitator fields according to established operating procedures.

Shutdown Practices

- Deenergize the precipitator starting with the inlet fields, which are nearest to the boiler, and progress toward the outlet. Deenergizing is done as soon as possible after the unit is off line to prevent unnecessary sparking, condensation or dust buildup on the insulators.
- Rappers and vibrators are allowed to operate for at least two (2) hours to remove as much dust from the plates and electrodes as possible.
- Prior to entering the precipitator assure proper Hold Tag procedures and Confined Space / Vessel Entry procedures are followed. Operations assures that all "Kirk Key" interlocks have been properly activated in order to isolate and ground the T-R sets. Assure that all nuclear source level detection devices are surveyed, and that all source shutters are locked in the closed position.

Operations

Routine Operation

- Daily operation requires monitoring and record keeping (recording of voltage and amperage levels during routine operation), preventive maintenance, evaluation of applicable monitoring equipment, and response to equipment malfunctions as needed to meet environmental

compliance requirements. Operations personnel will prepare Work Request(s) within 8 hours of identifying any equipment performance problem(s).

- The normal voltage range is 0 – 600 AC volts and normal amperage range is 0 – 150 AC amperes.
- "Under Voltage" limit is factory set and is not adjustable, and is defined as less than 15 volts within a continuous one-minute period.
- "Over Current" limit is set on a potentiometer having a scale of 1-10. The maximum rated line amperage is 96 amperes.

Preventative Maintenance - Daily

- Detection equipment, with alarm displays in the control room, alert operators to irregular operating conditions such as low voltage, low amperage, rapper failure, vibrator failure, high hopper levels, high opacity, and continuous emissions monitor failure. If an alarm occurs, corrective action is taken in an expeditious manner.
- Daily walk down of the precipitator is conducted to check for air inleakage, hot gas and/or fly ash leaks in the following areas-, precipitator casing, access doors, expansion joints, ducts, and dust removal system.
- During the daily walk downs, visual checks are made to check hopper heater operation indicators, status of pressurizing fans, local arcing on the rappers and arcing on the T-R high voltage bus.
- Flyash is removed from all ESP hoppers at least once per twelve-hour shift.
- Daily inspection of the flyash collection equipment is performed to assure continuous dust removal is maintained.
- Operations personnel generate appropriate work requests within 8 hours if any inadequacies or operational problems are detected. All maintenance is conducted so as not to jeopardize the integrity of the unit or effect environmental compliance requirements.

Preventative Maintenance - Monthly

- Technical Group checks rapper operation.
- Work requests are generated within 8 hours to address all irregular operating conditions.

Preventative Maintenance – Scheduled

- Operations personnel assure that Outage Hold Tags are attached to all Electrostatic Precipitator (ESP) power fields and "Kirk Key" interlock procedures are followed so that the precipitator is safe to enter. All personnel entering must abide by Confined Space and Vessel Entry procedures. Assure that all nuclear source level detection devices are surveyed and that all shutters are locked in the closed position.
- All electrodes and collection plates are (if required) grit blasted by contractor. After the grit blasting and subsequent clean up is complete, the entire precipitator enclosure is inspected for dust buildup and damage to electrodes, collection plates, dampers, expansion joints, and hoppers. Particular attention is paid to evaluating proper alignment of electrodes and collection plates. Corrective action(s) is taken as needed.
- All T-R support insulators are cleaned and inspected for damage.
- All T-R electrical contacts are inspected for arcing damage to copper surfaces.

- All T-R control cabinets are cleaned, vacuumed and inspected for loose connections. All cabinet air filters are vacuumed.
- All rappers are inspected and repaired as necessary for proper operation.
- Penthouse heaters and fans are inspected for cleanliness and proper operation.
- All access doors are inspected for damage and new door seals are installed as needed.
- Flyash transport system valves and piping are inspected, and any buildup is cleaned from the piping. All piping wear areas are evaluated and corrected as necessary to assure continuous operation until the next scheduled outage.
- After all maintenance activities are complete and the precipitator is released by the Maintenance Group, Operations personnel inspect the ESP to assure that all tools have been removed, and all grounding straps have been returned to their proper storage facility. All access doors are closed and the "Kirk Key" procedure is followed to assure all keys are returned to the T-R control cabinets for operation. Maintenance Outage Hold Tags are removed as the last step.

Equipment Performance Monitoring

- Performance evaluation of the ESP is conducted using voltage and amperage data that is collected during every shift while operating. Status monitoring equipment is installed and provides an alarm when low voltage or amperage conditions occur.
- Continuous opacity monitoring (COM) equipment is located in the stack down stream of the precipitators. Data from this COM system is reduced to six minute averages. A Data Acquisition and Handling System (DAHS) visual display with an alarm function is located in the equipment control room.

Performance Evaluation Criteria

- Corrective action will be taken to avoid, when possible, the exceedence of any emission standard. Any excess emissions will be reported according to 567 IAC Chapter 24.

Corrective Action

(The type of corrective action and amount of time needed to respond will vary according to the situation)

Operations

- Opacity excursions due to boiler and or control equipment operating problems can generally be identified and addressed by the equipment operators in a relatively short period of time. Examples include boiler upsets due to change in fuel flow; rapid, unexpected electrical load changes; and T-R set trips.

Equipment Failure

- Deterioration of equipment performance may take longer to identify and substantiate. Operations personnel will prepare a Work Request after verifying the problem. Examples include significant voltage and/or amperage changes, wire breakage, rapper system failure, and air infiltration.

- Catastrophic equipment failures are obvious. Excess particulate emissions will be eliminated as quickly as possible considering the impact on other operating components and consumer electrical demand.
- In either case, if excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.

Record Keeping and Reporting

- All records will be retained for at least five (5) years, and will be available for review upon request by any authorized regulatory agency. Records to be retained for and/or submitted to regulatory agencies include:
 - 40 CFR Part 75 reports.
 - Voltage and amperage readings.
 - Maintenance records (Computerized maintenance records are kept on each piece of equipment for the life of the item.)
 - ESP spare parts inventory

Quality Control

(The following quality control measures will be implemented in association with the operation of the ESP)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturers recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Multi-Cyclone (Mechanical Separator) Operation And Maintenance Plan

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 70, Spreader Stoker Boiler
Emission Point:	EP 70, Boiler Stack
Control Equipment:	CE71

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- The Multi-Cyclone (Mechanical Separator) is an internal, integral part of the boiler flue gas path that is designed to remove the larger, heavier fly ash particles from the flue gas stream before it enters the electrostatic precipitator.

The equipment consists of 161 tube (cyclone) assemblies. Each tube assembly is a mini cyclone that can be described as a tube within a tube. The inner tube is offset vertically so that it extends above the top of, and does not reach the bottom of the outer tube. Inlet guide vanes that are positioned to produce a cyclonic flow through the outer tube join the inner and outer tubes. Inlet tubes have a 9-inch O.D. and are 32 inches long. Outlet tubes have a 6-inch O.D. and vary in length.

Each cyclone assembly is attached to, and penetrates two horizontal tube sheets. The outer tube is attached to the bottom sheet and the inner tube is attached to the top tube sheet. The dimension between the tube sheets increases from about 47 inches at the inlet to about 85 inches at the outlet. Cyclones are arranged in 7 rows with 23 assemblies in each row. Tubes in each of the seven rows have a different length that reflects the changing dimension

between the tube sheets. The tube lengths for each of the rows are 21-1/16 inches, 27-5/8 inches, 33-11/16 inches, 40 inches, 46-5/16 inches, 52-5/8 inches and 58-15/16 inches.

Preventative Maintenance - General

- The location and type of the equipment precludes any frequent, routine preventive maintenance. There is no means of visually observing the equipment while it is in service, and there are no remote sensing devices to monitor equipment operation.

Preventative Maintenance – Scheduled

- Operations personnel assure that all Outage Hold Tags are hung to allow safe entry into the boiler. Maintenance personnel request Hold Tags that are specific to the equipment. All personnel entering the Cyclone abide by Confined Space and Vessel Entry Procedures.
- All metal surfaces of the cyclone tubes are inspected for wear, particularly the exterior area of the outlet tube that is impacted by the flue gas as it passes between the tube sheets seeking a path through one of the cyclone assemblies. The dust discharge boot on the bottom of each of the cyclone assemblies is also inspected. Repairs are made as needed.
- After all inspection and/or maintenance activities are complete, Hold Tags are removed so that the equipment is available for service.

Corrective Actions

- Operations - The only indication of a possible problem with the Cyclone is an opacity excursion. However, boiler upset or precipitator problems are more common causes of an opacity excursion. Opacity excursions due to boiler and/or control equipment can generally be identified and addressed by the equipment operators in a relatively short period of time.
- Equipment Failure - Since this equipment serves as a preliminary particulate control device that is followed by an electrostatic precipitator, the failure of a few of the modules would not affect particulate emissions to the atmosphere. If a large number of modules failed, deterioration in precipitator performance may be observed. The unit will be shut down to make repairs when the opacity limit cannot be met. A catastrophic failure of the equipment would affect boiler operation as well as particulate emissions, and the unit would also be shut down to make repairs.

Record Keeping and Reporting

- All maintenance records will be retained for at least five (5) years, and will be available for review upon request by a representative of any authorized regulatory agency.

Quality Control

- An inventory of appropriate spare parts will be maintained. Parts will be re-ordered as they are used.

Emission Point ID Number: 80**Associated Equipment**

Associated Emission Unit ID Number: 80

Emissions Control Equipment ID Numbers: CE80A

Emissions Control Equipment Descriptions: ESP

Continuous Emissions Monitors ID Numbers: ME80A, ME81, ME82, ME83 and ME84

Emission Unit vented through this Emission Point: 80

Emission Unit Description: Unit 8 Cyclone Boiler

Raw Material/Fuel (*): Bituminous Coal, Subbituminous Coal, Natural Gas,
Waste Solvent for Combustion

(*) Occasionally diesel fuel or used oil may be combusted in this boiler for short periods to facilitate slag tapping or coal combustion.

Rated Capacity: 890 MMBtu/hr

47.97 Ton/hr Bituminous Coal

55.63 Ton/hr Subbituminous Coal

890 MMBtu/hr Natural Gas

0.0023 Ton/hr Waste Solvent for Combustion

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limits: 267 lb/hr, 0.30 lb/MMBtu, 1169 tpy

Authority for Requirement: Iowa DNR Construction Permit 95-A-373

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 6 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 95-A-373

Pollutant: Sulfur Dioxide (SO₂) for boilers 7 and 8.

Emission Limits: 2772 lb/hr, 12,141 tpy.

The combined total emission of sulfur dioxide from boiler 7 and boiler 8 shall not exceed 2772 pounds per hour, averaged over a 24-hour calendar day. The combined total emission of sulfur dioxide from boiler 7 and boiler 8 shall not exceed 12,141 tons per year.

Authority for Requirement: Iowa DNR Construction Permits 74-A-175-S and 95-A-373

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: Sulfur Dioxide Allowances

Authority for Requirement: 567 IAC 22.108(7) (See attached Phase II Permit in appendix)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below:

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 diesel fuel exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record Keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

1. The combined SO₂ emissions in pounds per hour from boilers 7 and 8 averaged over a 24-hour calendar day.
2. The combined SO₂ emissions in tons per calendar year from boilers 7 and 8.
3. The facility shall monitor the percent of sulfur by weight in the diesel fuel as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3) (Iowa DNR construction permits 74-A-175-S and 95-A-373.)

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 225

Stack Diameter (inches): 103

Stack Exhaust Flow Rate (acfm): 225,000

Stack Temperature (°F): 358

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 95-A-373

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (PM)

1st Stack Test to be Completed by – February 2, 2005

2nd Stack Test to be Completed between - August 2, 2006 and August 2, 2007

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Continuous Emissions Monitoring:

Pollutant - Opacity

Operational Specifications - 40 CFR Part 60

Initial System Calibration/Quality Assurance – 8/97

Ongoing System Calibration/Quality Assurance - 40 CFR Part 60

Reporting & Record keeping - 40 CFR Part 60. Submit all reports and petitions required by 40 CFR 60 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring under the acid rain program and the 40% opacity (visible emissions) limit

Authority for Requirement - 567 IAC 25.1(1), 567 IAC 25.2, 567 IAC 23.3(2)"d",
567 IAC 22.108(4), and 567 IAC 22.108(15)

Pollutant - Sulfur Dioxide (SO₂)

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance – 8/11-8/26/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring under the acid rain program and the 6 lb/MMBtu SO₂ emission limit.

Authority for Requirement - 567 IAC 25.2, 567 IAC 23.3(3)"a"(2),
567 IAC 22.108(4), and 567 IAC 22.108(15),
Iowa DNR Construction Permit 95-A-373, and
EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Pollutant - Nitrogen Oxides (NO_x)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 8/11-8/26/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring under the acid rain program
Authority for Requirement - 567 IAC 25.2

Other Parameters

Pollutant - Other - Carbon Dioxide (CO₂)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 8/11-8/26/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring under the acid rain program.
Authority for Requirement - 567 IAC 25.2, 567 IAC 22.108(4), 567 IAC 22.108(15), Iowa DNR Construction Permit 95-A-373, and EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Pollutant - Other - Flow
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 8/11-8/26/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75. Submit all reports and petitions required by 40 CFR 75 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring under the acid rain program.
Authority for Requirement - 567 IAC 25.2, 567 IAC 22.108(4), 567 IAC 22.108(15), Iowa DNR Construction Permit 95-A-373, and EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Electrostatic Precipitator Agency Operation & Maintenance Plan

This Operations and Maintenance (O&M) Plan pertains to the electrostatic precipitator that services coal/gas fired boiler 8.

Electrostatic Precipitator Operation & Maintenance

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 80, Cyclone Furnace
Emission Point:	EP 80, Boiler Stack
Control Equipment:	CE80A

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.

- A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
- In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Prestart-up Practices

- Operations personnel assure that all access doors have been sealed, and that all "Kirk Keys" have been returned to their respective T-R cabinet.
- Perform air load tests on all T-R sets. The manufacturers established, incremental loading, and trip testing procedure for each T-R set is used.

Start-up Practices

(The following ESP start-up procedures shall be used as part of equipment re-start activities)

- Assure all insulator heaters and pressurizing fans have been returned to operating status.
- Assure the rapper and vibrator systems have been energized.
- When the boiler exit gas has maintained 240 °F for a period of two hours, in a manner consistent with good practice for minimizing emissions, energize the precipitator fields according to established operating procedures.

Shutdown Practices

- Deenergize the precipitator starting with the inlet fields, which are nearest to the boiler, and progress toward the outlet. Deenergizing is done as soon as possible after the unit is off line to prevent unnecessary sparking, condensation or dust buildup on the insulators.
- Rappers and vibrators are allowed to operate for at least two (2) hours to remove as much dust from the plates and electrodes as possible.
- Prior to entering the precipitator assure proper Hold Tag procedures and Confined Space / Vessel Entry procedures are followed. Operations assures that all "Kirk Key" interlocks have been properly activated in order to isolate and ground the T-R sets. Assure that all nuclear source level detection devices are surveyed, and that all source shutters are locked in the closed position.

Operations

Routine Operation

- Daily operation requires monitoring and record keeping (recording of voltage and amperage levels during routine operation), preventive maintenance, evaluation of applicable monitoring equipment, and response to equipment malfunctions as needed to meet environmental

compliance requirements. Operations personnel will prepare Work Request(s) within 8 hours of identifying any equipment performance problem(s).

- Digital T/R controllers continuously display voltage and amperage experienced by the T/R sets. Each T/R controller constantly analyzes data to alert operators of abnormal operating conditions in the controls, or to trigger alarms that cause the controls to trip and the ESP, which then requires the ESP to be reset manually. Alarm conditions activate an alarm in the Unit 8 Control Room.
- Alarm messages are selected as the performance indicator because they are indicative of operation of the electrostatic precipitator in a manner necessary to comply with the particulate emission standard. Each of the six T/R set controllers independently, automatically increase or decrease voltage and current in a manner consistent with maximizing T/R set performance.
- When an excursion occurs (an alarm condition), corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation.

Preventative Maintenance - Daily

- Detection equipment, with alarm displays in the control room, alert operators to irregular operating conditions such as low voltage, low amperage, rapper failure, vibrator failure, high hopper levels, high opacity, and continuous emissions monitor failure. If an alarm occurs, corrective action is taken.
- Daily walk down of the precipitator is conducted to check for air inleakage, hot gas and/or fly ash leaks in the following areas: precipitator casing, access doors, expansion joints, ducts, and dust removal system.
- During the daily walk downs, visual checks are made to check hopper heater operation indicators, for local arcing on the rappers and arcing on the T-R high voltage bus.
- Flyash is removed from all ESP hoppers at least once per twelve-hour shift.
- Daily inspection of the flyash collection equipment is performed to assure continuous dust removal is maintained.
- Operations personnel generate appropriate work requests within 8 hours if any inadequacies or operational problems are detected. All maintenance is conducted so as not to jeopardize the integrity of the unit or effect environmental compliance requirements.

Preventative Maintenance - Monthly

- Technical Group checks rapper operation.
- Work requests are generated within 8 hours to address all irregular operating conditions.

Preventative Maintenance – Scheduled

- Operations personnel assure that Outage Hold Tags are attached to all Electrostatic Precipitator (ESP) power fields and "Kirk Key" interlock procedures are followed so that the precipitator is safe to enter. All personnel entering must abide by Confined Space and Vessel Entry procedures. Assure that all nuclear source level detection devices are surveyed and that all shutters are locked in the closed position.
- All electrodes and collection plates are (if required) grit blasted by contractor. After the grit blasting and subsequent clean up is complete, the entire precipitator enclosure is inspected for dust buildup and damage to electrodes, collection plates, dampers, expansion joints, and

hoppers. Particular attention is paid to evaluating proper alignment of electrodes and collection plates. Corrective action(s) is taken as needed.

- All T-R support insulators are cleaned and inspected for damage.
- All T-R electrical contacts are inspected for arcing damage to copper surfaces.
- All T-R control cabinets are cleaned, vacuumed and inspected for loose connections. All cabinet air filters are changed.
- All rappers are inspected and repaired as necessary for proper operation.
- Penthouse heaters and fans are inspected for cleanliness and proper operation.
- All access doors are inspected for damage and new door seals are installed as needed.
- Flyash transport system valves and piping are inspected, and any buildup is cleaned from the piping. All piping wear areas are evaluated and corrected as necessary to assure continuous operation until the next scheduled outage.
- After all maintenance activities are complete and the precipitator is released by the Maintenance Group, Operations personnel inspect the ESP to assure that all tools have been removed, and all grounding straps have been returned to their proper storage facility. All access doors are closed and the "Kirk Key" procedure is followed to assure all keys are returned to the T-R control cabinets for operation. Maintenance Outage Hold Tags are removed as the last step.

Equipment Performance Monitoring

- Performance evaluation of the ESP is conducted using voltage and amperage data that is collected during every shift while operating. Status monitoring equipment is installed and provides an alarm when low voltage or amperage conditions occur.
- Continuous opacity monitoring (COM) equipment is located in the stack down stream of the precipitator. Data from this COM system is reduced to six minute averages. A Data Acquisition and Handling System (DAHS) visual display with an alarm function is located in the equipment control room.

Performance Evaluation Criteria

- Corrective action will be taken to avoid, when possible, the exceedence of any emission standard. Any excess emissions will be reported according to 567 IAC Chapter 24.

Corrective Action

(The type of corrective action and amount of time needed to respond will vary according to the situation)

Operations

- Opacity excursions due to boiler and or control equipment operating problems can generally be identified and addressed by the equipment operators in a relatively short period of time. Examples include boiler upsets due to change in fuel flow; rapid, unexpected electrical load changes; and T-R set trips.

Equipment Failure

- Deterioration of equipment performance may take longer to identify and substantiate. Operations personnel will prepare a Work Request after verifying the problem. Examples

include significant voltage and/or amperage changes, wire breakage, rapper system failure, and air infiltration.

- Catastrophic equipment failures are obvious. Excess particulate emissions will be eliminated as quickly as possible considering the impact on other operating components and consumer electrical demand.
- In either case, if excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.

Record Keeping and Reporting

- All records will be retained for at least five (5) years, and will be available for review upon request by any authorized regulatory agency. Records to be retained for and/or submitted to regulatory agencies include:
 - 40 CFR Part 75 reports.
 - Voltage and amperage readings.
 - Maintenance records (Computerized maintenance records are kept on each piece of equipment for the life of the item.)
 - ESP spare parts inventory

Quality Control

(The following quality control measures will be implemented in association with the operation of the ESP)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturer's recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Emission Point ID Number: 810**Associated Equipment**

Associated Emission Unit ID Numbers: CE810A/CE810B

Emissions Control Equipment ID Number: CE810A/CE810B

Control Equipment Description: Fabric Filter/Cyclonic Separator

Emissions Control Equipment ID Number: CE811

Control Equipment Description: Cartridge Filter – Final Filter

Emission Units vented through this Emission Point: CE810A/CE810B

Emission Unit Description: Filter/Separator Dust Collector DC-6A

Raw Material/Fuel: Fly Ash

Rated Capacity: 8 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will required the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence.

The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-639
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.025 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 00-A-639

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 142

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 887

Stack Temperature (°F): 93

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 00-A-639

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 811 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 812

Emission Units vented through this Emission Point: 812

Emission Unit Description: Wet Fly Ash Truck Loading

Raw Material/Fuel: Fly Ash

Rated Capacity: 20 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 813 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 810

Emission Units vented through this Emission Point: 810

Emission Unit Description: Fly Ash Silo

Raw Material/Fuel: Fly Ash

Rated Capacity: 20 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 814**Associated Equipment**

Associated Emission Unit ID Numbers: 810 & 811

Emissions Control Equipment ID Number: CE812

Control Equipment Description: Silo Vent Filter

Emission Units vented through this Emission Point: 810

Emission Unit Description: Fly Ash Silo

Raw Material/Fuel: Fly Ash

Rated Capacity: 8 Ton/hr.

Emission Units vented through this Emission Point: 811

Emission Unit Description: Dry Fly Ash Truck Loading

Raw Material/Fuel: Fly Ash

Rated Capacity: 20 Ton/hr.

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

⁽¹⁾ In lieu of stack testing requirement, the operation of the emission unit shall not cause any visible emissions from Emission Point 814.

Authority for Requirement: Iowa DNR Construction Permit 01-A-218
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-218
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 65

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (acfm): 5

Stack Temperature (°F): 150

Discharge Style: Downward Discharge

Authority for Requirement: Iowa DNR Construction Permit 01-A-218

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 90**Associated Equipment**

Associated Emission Unit ID Number: 90

Emissions Control Equipment ID Numbers: CE91, CE92, CE93 and CE94

Emissions Control Equipment Descriptions: 2 Electrostatic Precipitators (CE91 & CE92) and
2 Wet Limestone Scrubbers (CE93 & CE94)

Continuous Emissions Monitors ID Numbers: ME90A, ME91, ME92, ME95, ME96, ME97
and ME98

Emission Unit vented through this Emission Point: 90

Emission Unit Description: Unit 9 Dry Bottom Tangential Fired Boiler

Raw Material/Fuel: Bituminous Coal, Subbituminous Coal, and/or Fuel Oil

Rated Capacity: 1,556 MMBtu/hr

72.24 Ton/hr Bituminous Coal

95.43 Ton/hr Subbituminous Coal

1,725.6 Gallons/hr Fuel Oil

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"z"
40 CFR 60 Subpart Da

Pollutant: Particulate Matter (PM)

Emission Limits: 0.03 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 80-A-191
567 IAC 23.1(2)"z"
40 CFR 60 Subpart Da

EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 0.56 lb/MMBtu 24 hour calendar day average,
0.45 lb/MMBtu 30 day rolling average,

Authority for Requirement: EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S
dated 9/6/83/LAER offset condition, and
40 CFR 60 Subpart Da

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: Sulfur Dioxide Allowances

Authority for Requirement: 567 IAC 22.108(7) (See attached Phase II Permit in appendix)

Pollutant: Nitrogen Oxide (NO_x)

Emission Limits: See attached Phase II Acid Rain Permit

Authority for Requirement: 567 IAC 22.125(4) (Attached Phase II Acid Rain Permit)
40 CFR 76.7(a)(1)

Pollutant: Nitrogen Oxides (NO_x)

BACT Emission Limits:

0.60 lb/MMBtu based on a 30-day rolling average for bituminous coal

0.50 lb/MMBtu based on a 30-day rolling average for subbituminous coal

0.30 lb/MMBtu based on a 30-day rolling average for liquid fuels

0.20 lb/MMBtu based on a 30-day rolling average for gas

When two or more fuels are combusted simultaneously, the applicable Nitrogen Oxides (NO_x) standard is determined by proration using the following formula:

$$En = [(0.20)(w) + (0.30)(x) + (0.50)(y) + (0.60)(z) + (0.80)(v)] / 100$$

where:

"En" is the applicable standard for nitrogen oxides when multiple fuels are combusted simultaneously (lb/MMBtu heat input);

"w" is the percentage of total heat input derived from the combustion of fuels subject to 0.2 lb/MMBtu heat input standard (Natural gas);

"x" is the percentage of total heat input derived from the combustion of fuels subject to the 0.30 lb/MMBtu heat input standard (Liquid fuels);

"y" is the percentage of total heat input derived from the combustion of fuels subject to the 0.50 lb/MMBtu heat input standard (Subbituminous coal);

"z" is the percentage of total heat input derived from the combustion of fuels subject to the 0.60 lb/MMBtu heat input standard (Bituminous coal);

"v" is the percentage of total heat input delivered from the combustion of fuels subject to the 0.80 lb/MMBtu heat input standard (25% or more coal refuse or lignite).

Authority for Requirement: 567 IAC 23.1(2)"z"

40 CFR 60 Subpart Da

EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The flue gas desulfurization system shall remove no less than 92 percent of the SO₂ on a 30 day rolling average.

Authority for Requirement: EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83/LAER offset conditions, and
40 CFR 60 Subpart Da

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (PM)

1st Stack Test to be Completed by - February 2, 2005

2nd Stack Test to be Completed between - August 2, 2006 and August 2, 2007

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement - 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Continuous Emissions Monitoring:

Pollutant - Opacity

Operational Specifications - 40 CFR Part 60

Initial System Calibration/Quality Assurance – 7/97

Ongoing System Calibration/Quality Assurance - 40 CFR Part 60

Reporting & Record keeping - 40 CFR Part 60. Submit all reports and petitions

required by 40 CFR 60 to the Iowa DNR in order to demonstrate compliance with
the 20% opacity (visible emissions) limit

Authority for Requirement - 567 IAC 25.1(1), 567 IAC 23.3(2)"d",
567 IAC 22.108(4), and 567 IAC 22.108(15)
40 CFR 60 Subpart Da

Pollutant - Sulfur Dioxide (SO₂) (Two required)
Operational Specifications - 40 CFR Part 60 (Inlet CEMS) and Part 75 (Outlet CEMS)
Initial System Calibration/Quality Assurance – 8/12-8/26/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60 (Inlet CEMS)
and Part 75 (Outlet CEMS)
Reporting & Record keeping - 40 CFR Part 60 and Part 75. Submit all reports and
Petitions required by 40 CFR Part 60 and Part 75 to the Iowa DNR in order to
demonstrate compliance with continuous emission monitoring under the acid rain
program and the set emission limits.
Authority for Requirement - 567 IAC 25.2, 567 IAC 23.3(3)"a"(2),
567 IAC 22.108(4), 567 IAC 22.108(15)
40 CFR 60 Subpart Da, and
EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Pollutant - Nitrogen Oxides (NO_x)
Operational Specifications - 40 CFR Part 60 and Part 75
Initial System Calibration/Quality Assurance - 8/12-8/26/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60 and Part 75
Reporting & Record keeping - 40 CFR Part 60 and Part 75. Submit all reports
and petitions required by 40 CFR 60 and Part 75 to the Iowa DNR in order to
demonstrate compliance with continuous emission monitoring under the acid rain
program and the set emission limit
Authority for Requirement - 567 IAC 25.2
40 CFR 60 Subpart Da

Other Parameters

Pollutant - Other - Carbon Dioxide (CO₂) (Two required)
Operational Specifications - 40 CFR Part 60 (Inlet CEMS) and Part 75 (Outlet CEMS)
Initial System Calibration/Quality Assurance - 8/12-8/26/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60 (Inlet CEMS)
and Part 75 (Outlet CEMS)
Reporting & Record keeping - 40 CFR Part 60 and Part 75. Submit all reports and
petitions required by 40 CFR Part 60 and Part 75 to the Iowa DNR in order to
demonstrate compliance with continuous emission monitoring under the acid rain
program and the set emission limits.
Authority for Requirement - 567 IAC 25.2, 567 IAC 22.108(4),
567 IAC 22.108(15),
40 CFR 60 Subpart Da, and
EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

Pollutant - Other - Flow

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 8/12-8/26/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75. Submit all reports and petitions required by 40 CFR Part 75 to the Iowa DNR in order to demonstrate compliance with continuous emission monitoring under the acid rain program.

Authority for Requirement - 567 IAC 25.2, 567 IAC 22.108(4),
567 IAC 22.108(15), and

EPA PSD permit 80-E-001 dated 1/24/80 and revision 80-E-001-S dated 9/6/83

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plans Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter and SO₂

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Electrostatic Precipitator and Wet Limestone Scrubber

Agency Operation & Maintenance Plans

This Operations and Maintenance (O&M) Plan pertains to the two (2) electrostatic precipitators and two (2) wet limestone scrubbers that service coal/oil fired boiler 9.

Electrostatic Precipitator Operation & Maintenance (Two located in parallel)

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 90, Tangentially Fired Boiler
Emission Point:	EP 90, Boiler Stack
Control Equipment:	CE91 and CE92

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Prestart-up Practices

- Operations personnel assure that all access doors have been sealed, and that all "Kirk Keys" have been returned to their respective T-R cabinet.
- Perform air load tests on all T-R sets. The manufacturers established, incremental loading, and trip testing procedure for each T-R set is used.

Start-up Practices

(The following ESP start-up procedures shall be used as part of equipment re-start activities)

- Assure all insulator heaters and pressurizing fans have been returned to operating status.
- Assure the rapper and vibrator systems have been energized.
- When the boiler exit gas has maintained 240 °F for a period of two hours, in a manner consistent with good practice for minimizing emissions, energize the precipitator fields according to established operating procedures.

Shutdown Practices

- Deenergize the precipitator starting with the inlet fields, which are nearest to the boiler, and progress toward the outlet. Deenergizing is done as soon as possible after the unit is off line to prevent unnecessary sparking, condensation or dust buildup on the insulators.

- Rappers and vibrators are allowed to operate for at least two (2) hours to remove as much dust from the plates and electrodes as possible.
- Prior to entering the precipitator assure proper Hold Tag procedures and Confined Space / Vessel Entry procedures are followed. Operations assures that all "Kirk Key" interlocks have been properly activated in order to isolate and ground the T-R sets. Assure that all nuclear source level detection devices are surveyed, and that all source shutters are locked in the closed position.

Operations

Routine Operation

- Daily operation requires monitoring and record keeping (recording of voltage and amperage levels during routine operation), preventive maintenance, evaluation of applicable monitoring equipment, and response to equipment malfunctions as needed to meet environmental compliance requirements. Operations personnel will prepare Work Request(s) within 8 hours of identifying any equipment performance problem(s).
- Analog meters continuously display voltage and amperage. The ESP controls continuously monitor for "A-C Low Voltage" and "Primary Over Load" (current) events that activate an alarm at the ESP control panel, and send an alarm message to the FGD Control Room.
- Each of the eight T/R set controllers independently increase or decrease voltage and current automatically in a manner consistent with maximizing T/R set performance.

Preventative Maintenance - Daily

- Detection equipment, with alarm displays in the control room, alert operators to irregular operating conditions such as low voltage, low amperage, rapper failure, vibrator failure, high hopper levels, high opacity, and continuous emissions monitor failure. If an alarm occurs, corrective action is taken to assure emissions limits are not exceeded.
- Daily walk down of the precipitator is conducted to check for air inleakage, hot gas and/or fly ash leaks in the following areas-, precipitator casing, access doors, expansion joints, ducts, and dust removal system.
- During the daily walk downs, visual checks are made to check hopper heater operation indicators, status of pressurizing fans, local arcing on the rappers, arcing on the T-R high voltage bus, and oil levels on the T-R sets transformers.
- Flyash is removed from all ESP hoppers at least once per twelve-hour shift.
- Daily inspection of the flyash collection equipment is performed to assure continuous dust removal is maintained.
- Operations personnel generate appropriate work requests within 8 hours if any inadequacies or operational problems are detected. All maintenance is conducted so as not to jeopardize the integrity of the unit or effect environmental compliance requirements.

Preventative Maintenance - Monthly

- Technical Group checks rapper operation.
- Record T-R set voltages and amperages
- Work requests are generated within 8 hours to address all irregular operating conditions.

Preventative Maintenance – Scheduled

- Operations personnel assure that Outage Hold Tags are attached to all Electrostatic Precipitator (ESP) power fields and "Kirk Key" interlock procedures are followed so that the precipitator is safe to enter. All personnel entering must abide by Confined Space and Vessel Entry procedures. Assure that all nuclear source level detection devices are surveyed and that all shutters are locked in the closed position.
- All electrodes and collection plates are (if required) grit blasted by contractor. After the grit blasting and subsequent clean up is complete, the entire precipitator enclosure is inspected for dust buildup and damage to electrodes, collection plates, dampers, expansion joints, and hoppers. Particular attention is paid to evaluating proper alignment of electrodes and collection plates. Corrective action(s) is taken as needed.
- All T-R support insulators are cleaned and inspected for damage.
- All T-R electrical contacts are inspected for arcing damage to copper surfaces.
- All T-R control cabinets are cleaned, vacuumed and inspected for loose connections. All cabinet air filters are changed.
- All rappers are inspected and repaired as necessary for proper operation.
- Penthouse heaters and fans are inspected for cleanliness and proper operation.
- All access doors are inspected for damage and new door seals are installed as needed.
- Flyash transport system valves and piping are inspected, and any buildup is cleaned from the piping. All piping wear areas are evaluated and corrected as necessary to assure continuous operation until the next scheduled outage.
- After all maintenance activities are complete and the precipitator is released by the Maintenance Group, Operations personnel inspect the ESP to assure that all tools have been removed, and all grounding straps have been returned to their proper storage facility. All access doors are closed and the "Kirk Key" procedure is followed to assure all keys are returned to the T-R control cabinets for operation. Maintenance Outage Hold Tags are removed as the last step.

Equipment Performance Monitoring

- Performance evaluation of the ESP is conducted using voltage and amperage data that is collected during every each shift while operating. Status monitoring equipment is installed and provides an alarm when low voltage or amperage conditions occur.
- Continuous opacity monitoring (COM) equipment is located in the inlet duct of the SO₂ scrubbers down stream of both the precipitators. Data from this COM system is reduced to six minute averages. A Data Acquisition and Handling System (DAHS) visual display with an alarm function is located in the equipment control room.

Performance Evaluation Criteria

- Corrective action will be taken to avoid, when possible, the exceedence of any emission standard. Any excess emissions will be reported according to 567 IAC Chapter 24.

Corrective Action

(The type of corrective action and amount of time needed to respond will vary according to the situation)

Operations

- Opacity excursions due to boiler and or control equipment operating problems can generally be identified and addressed by the equipment operators in a relatively short period of time. Examples include boiler upsets due to change in fuel flow; rapid, unexpected electrical load changes; and T-R set trips.

Equipment Failure

- Deterioration of equipment performance may take longer to identify and substantiate. Operations personnel will prepare a Work Request after verifying the problem. Examples include significant voltage and/or amperage changes, wire breakage, rapper system failure, and air infiltration.
- Catastrophic equipment failures are obvious. Excess particulate emissions will be eliminated as quickly as possible considering the impact on other operating components and consumer electrical demand.
- In either case, if excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.

Record Keeping and Reporting

- All records will be retained for at least five (5) years, and will be available for review upon request by any authorized regulatory agency. Records to be retained for and/or submitted to regulatory agencies include:
 - 40 CFR 75 and 40 CFR Part 60 Subpart Da reports.
 - Voltage and amperage readings.
 - Maintenance records (Computerized maintenance records are kept on each piece of equipment for the life of the item.)
 - ESP spare parts inventory

Quality Control

(The following quality control measures will be implemented in association with the operation of the ESP)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturers recommendations.
 - This Operation and Maintenance Plan will be available for review at the facility.
 - Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.
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Wet Limestone Scrubber Agency Operation & Maintenance Plan
Flue Gas Desulfurization System
(Two 100% capacity systems)

Facility:	Muscatine Power and Water
EIQ Number:	92-3726
Emission Unit:	EU 90, Tangentially Fired Boiler
Emission Point:	EP 90, Boiler Stack
Control Equipment:	CE93 and CE94

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring, which to be of value requires the source to be operating, is not required during periods of time greater than one day in which the source does not operate.
- The appropriate measures and/or action plan for remediation, if excess emissions are occurring, are:
 - Either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.
 - A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment.
 - In the case of an electric utility, if the equipment is in direct support to the boiler, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.

- If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits

Prestart-up Practices

- Operations personnel assure that all essential equipment Outage Hold Tags are removed and equipment is prepared for operation.
- Operations personnel assure that the seal air system on the inlet and outlet dampers of the off line tower is placed in service, and that adequate seal air maintained. The seal air alarm system is returned to service to insure the safety of anyone entering the off line tower. FGDS reagent is processed, and vessels are filled for operation.

Start-up Practices (Operations Group)

- The tower is closed, and the appropriate slurry pumps, oxidation air systems, and booster fan are prepared for operation.
- When the flue gas exit temperature, fuel condition guidelines are met, and the precipitator is in service, the tower inlet and outlet dampers are opened and the booster fan is started.

Shutdown Practices

- The operating tower is shut down during the following conditions.
 - Boiler trip.
 - Precipitator trip.
 - Boiler combusting oil.
 - Scheduled Outage
- The operating tower inlet dampers are closed and booster fan speed is reduced to minimum. If the outage is extended more than one hour the booster fan is shut down.
- The seal air fans are started to maintain positive seal air on the inlet and outlet dampers of either off line tower when either boiler ID fan is operating.
- The Quencher pumps are shut down.
- If an outage is extended more than one hour, the WFC pump and Absorber Spray pumps are shut down.
- Slurry in the system is drained only after the scrubber is off line for a general unit outage.

Operations

Routine Operation

- Daily operation activities include recording of liquid flows, system density, system pH, temperatures, flue gas flow, airflow during routine operation, preventive maintenance, evaluation of applicable monitoring equipment, and response to equipment malfunctions as needed to meet environmental requirements.

Preventative Maintenance – Daily

- Detection equipment with alarms alerts operators to irregular system operating conditions such as system flows and temperatures, system pH, bearing temperature and vibration, equipment malfunction, and SO₂ monitoring equipment failure.
- A daily walk down of all scrubber related equipment is conducted to inspect for slurry leaks, flue gas leaks, pump malfunctions, steam leaks, and valve and piping condition.
- The Operations Group prepares work requests to address required repairs as well as solutions to operational problems.

Preventative Maintenance – Weekly

- The Maintenance Group conducts a system "walk down" each day Monday through Friday of every week. Minor adjustments are made to pump packing, pump drive belts, and valve packing.
- Maintenance personnel prepare Work Requests for required repairs.
- Maintenance personnel complete routinely scheduled PMs on redundant equipment associated with the scrubber system on an ongoing basis.

Preventative Maintenance – Scheduled

- The Operations Group assures that all Outage Hold Tags are attached to scrubber associated equipment power supplies and valves designated for maintenance. Tower Outage Hold Tags are hung on equipment that is associated with the scrubber module being cleaned.
- Tower maintenance includes the following tasks:
 - Outlet reheater steam coils are cleaned.
 - Upper mist eliminator packing is thoroughly cleaned and damaged mist eliminator packing is replaced.
 - Lower demister packing is cleaned and damaged demister packing is replaced as required.
 - All mist eliminator and demister spray nozzles are removed, cleaned, inspected, and replaced.
 - All scale in the upper loop of the absorber tower is cleaned from the tower walls and nozzle headers .
 - All Wetted Film Contactor (WFC) packing in the WFC section of the tower is removed and cleaned. Damaged pieces of packing are replaced. I-beam sections supporting the WFC packing are washed prior to replacing the packing.
 - After the WFC area and packing is cleaned, the packing is reinstalled.
 - All scale is removed from the bowl area using stainless scrapers and high pressure water washing.
 - Scale and debris that was washed from the upper loop packing is removed from the tower quencher area.
 - After the Tower has been cleaned, all WFC nozzles, Absorber nozzles, Quencher nozzles, and piping header systems are inspected for damage and/or scale accumulation, they are repaired as required.
 - Both tower inlet ducts, expansion joints, and dampers are checked for flyash accumulation, flyash erosion, and chemical corrosion. Both tower outlet ducts,

expansion joints, and dampers are also inspected. Corrective repairs are completed as needed.

- The following vessels are opened and cleaned. The liner and mixer coatings are inspected and repaired as required.
 - Absorber Feed Tank
 - Hydroclone Underflow Tank
 - Reagent Feed Tank
 - Make-up Water Tank
- The following pumps are disassembled, and impellers and liners replaced as required.
 - WFC Pump
 - Absorber Feed Pumps 901 & 902
 - Quencher Pumps A, B, & C
 - Hydroclone Feed Pumps A & B
- The limestone preparation system has redundant equipment so maintenance can be accomplished on one while the other is operational.

Equipment Performance Monitoring

- Operators evaluate FGDS performance by recording system operating parameters on a log sheet hourly, and comparing them to established historical system indicators. Five indicators that are cited in the Monitoring Plan for the Continuous Emissions Monitoring System (CEMS) are tower inlet pressure, reagent flow, absorber pH, tower gas flow, and booster fan speed.
- A CEMS records SO₂ emissions at the tower inlet and stack outlet. The system measures lb./MMBTU and percent removal. A Data Acquisition and Handling System (DAHS) visual display with an alarm function is located in the FGDS control room to keep Operators apprised of SO₂ removal.

Performance Evaluation Criteria

- Corrective action will be taken before any 24-hour or 30-day rolling average emissions limit is exceeded. Operators follow emissions on the SO₂ DAHS for any increasing trends so system operation can be modified.

Corrective Action

- The FGDS has two 100 percent capacity scrubber towers with associated pumps. If one tower becomes incapable of producing the desired SO₂ removal, the flue gas shall be directed to the other tower as soon as possible. Operations and/or Maintenance personnel will address the problem in the malfunctioning tower as soon as possible, but no later than the beginning of the next daily shift.
 - Excess Emissions shall be reported as required.
- If non-redundant FGDS equipment malfunctions and excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time.
 - An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time.

- A reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service.
- If criteria established in 40 CFR 60.41a to define SO₂ "emergency conditions" are met, the system is operated under the 40 CFR 60.46a "compliance provisions". A utility memorandum titled " Unit 9 SO₂ Emergency Conditions Departmental Responsibilities-Rev. 3" dated 12/28/95 describes how the procedure is implemented, personnel responsibilities, and record keeping requirements.

Record Keeping and Reporting

- All records will be retained for at least five (5) years, and will be available for review upon request by any authorized regulatory agency. Records to be retained for and/or submitted to regulatory agencies include:
 - 40 CFR Part 75 and 40 CFR Part 60 Subpart Da reports
 - Operators daily log sheets.
 - Maintenance records (Computerized maintenance records are kept on each piece of equipment for the life of the item.)
 - FGDS spare parts inventory

Quality Control

(The following quality control measures will be implemented in association with the operation of the FGDS system)

- All instruments and equipment will be calibrated, operated, and maintained according to equipment manufacturers recommendations.
- This Operation and Maintenance Plan will be available for review at the facility.
- Visible emission observations from places where no visible emissions are expected shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 (a certified reader) or with 40 CFR 60, Appendix A, Method 22.

Emission Point ID Number: 912A (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 911A and 912A

Emission Units vented through this Emission Point: 911A
Emission Unit Description: Reversing Conveyor-A, Load
Raw Material/Fuel: Synthetic Gypsum
Rated Capacity: 20 Ton/hr

Emission Units vented through this Emission Point: 912A
Emission Unit Description: Reversing Conveyor-A, Discharge
Raw Material/Fuel: Synthetic Gypsum
Rated Capacity: 20 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 912B (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 911B and 912B

Emission Units vented through this Emission Point: 911B
Emission Unit Description: Reversing Conveyor-B, Load
Raw Material/Fuel: Synthetic Gypsum
Rated Capacity: 20 Ton/hr

Emission Units vented through this Emission Point: 912B
Emission Unit Description: Reversing Conveyor-B, Discharge
Raw Material/Fuel: Synthetic Gypsum
Rated Capacity: 20 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 915A**Associated Equipment**

Associated Emission Unit ID Number: 915

Emissions Control Equipment ID Number: CE915A

Control Equipment Description: Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: 915

Emission Unit Description: Load Out Conveyor Load

Raw Material/Fuel: Synthetic Gypsum

Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 915B**Associated Equipment**

Associated Emission Unit ID Number: 915

Emissions Control Equipment ID Number: CE915B

Control Equipment Description: Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: 915

Emission Unit Description: Load Out Conveyor Load

Raw Material/Fuel: Synthetic Gypsum

Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 916B (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 916A and 916B

Emission Units vented through this Emission Point: 916A
Emission Unit Description: Loadout Conv. Disch/Radial Stacker Conveyor Load
Raw Material/Fuel: Synthetic Gypsum
Rated Capacity: 40 Ton/hr

Emission Units vented through this Emission Point: 916B
Emission Unit Description: Radial Stacker Conveyor Discharge
Raw Material/Fuel: Synthetic Gypsum
Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 919 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 919, 919A and 919B

Emission Units vented through this Emission Point: 919

Emission Unit Description: Synthetic Gypsum Storage Pile

Raw Material/Fuel: Synthetic Gypsum

Rated Capacity: 40 Ton/hr

Emission Units vented through this Emission Point: 919A

Emission Unit Description: Synthetic Gypsum Truck Traffic

Raw Material/Fuel: Synthetic Gypsum

Rated Capacity: 2982.97 VMT/hr & 40 Ton/hr

Emission Units vented through this Emission Point: 919B

Emission Unit Description: Synthetic Gypsum Pile Formation

Raw Material/Fuel: Synthetic Gypsum

Rated Capacity: 497.16 VMT/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 920**Associated Equipment**

Associated Emission Unit ID Number: 920

Emissions Control Equipment ID Number: CE922

Control Equipment Description: Cartridge Filter Dust Collector

Emission Unit vented through this Emission Point: 920

Emission Unit Description: Fly Ash Silo

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.02 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 80-A-201

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 920A**Associated Equipment**

Associated Emission Unit ID Number: CE920 and 924

Emissions Control Equipment ID Number: CE920 and CE921

Control Equipment Description: Cyclone Separator and Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: CE920

Emission Unit Description: Cyclone Separator Dust Collector DC-13B

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Emission Unit vented through this Emission Point: 924

Emission Unit Description: Dry Fly Ash Temporary Storage – Truck Unloading

Raw Material/Fuel: Fly Ash

Rated Capacity: 20 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.02 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 80-A-200

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 920B**Associated Equipment**

Associated Emission Unit ID Number: CE920 and 924

Emissions Control Equipment ID Number: CE920 and CE921

Control Equipment Description: Cyclone Separator and Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: CE920

Emission Unit Description: Cyclone Separator Dust Collector DC-13B

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Emission Unit vented through this Emission Point: 924

Emission Unit Description: Dry Fly Ash Temporary Storage – Truck Unloading

Raw Material/Fuel: Fly Ash

Rated Capacity: 20 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

LAER Emission Limit(s): 0.02 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 80-A-200

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 921 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 921

Emission Unit vented through this Emission Point: 921

Emission Unit Description: Pug Mill A

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 922 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 922

Emission Unit vented through this Emission Point: 922

Emission Unit Description: Wet Fly Ash Truck

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 923 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 923

Emission Unit vented through this Emission Point: 923

Emission Unit Description: Fly Ash Truck

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 924 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 924

Emission Unit vented through this Emission Point: 924

Emission Unit Description: Dry Fly Ash Truck

Raw Material/Fuel: Fly Ash

Rated Capacity: 80 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 860 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 860, 860A, 860B, 860C and 860D

Emission Units vented through this Emission Point: 860

Emission Unit Description: Ash/Slag Storage Pile Wind Erosion

Raw Material/Fuel: Fly Ash

Rated Capacity: 40 Ton/hr

Emission Units vented through this Emission Point: 860A

Emission Unit Description: Ash/Slag Unpaved Roads

Raw Material/Fuel: Fly Ash

Rated Capacity: 3.52 VMT/hr

Emission Units vented through this Emission Point: 860B

Emission Unit Description: Ash/Slag Loading

Raw Material/Fuel: Fly Ash

Rated Capacity: 80 Ton/hr

Emission Units vented through this Emission Point: 860C

Emission Unit Description: Ash/Slag Unloading

Raw Material/Fuel: Fly Ash

Rated Capacity: 80 Ton/hr

Emission Units vented through this Emission Point: 860D

Emission Unit Description: Ash/Slag Storage Pile Bulldozing

Raw Material/Fuel: Fly Ash

Rated Capacity: 3 Dozers

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 925 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 924

Emission Units vented through this Emission Point: 924

Emission Unit Description: Dry Fly Ash Temporary Storage – Truck Unloading

Raw Material/Fuel: Fly Ash

Rated Capacity: 20 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: Iowa DNR Construction Permit 01-A-456
567 IAC 23.3(2)"d"

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c" (Iowa DNR Construction Permit 01-A-456)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): Fugitive Emissions

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (scfm): NA

Stack Temperature (°F): NA

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 01-A-456

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 926**Associated Equipment**

Associated Emission Unit ID Numbers: 926A1

Emissions Control Equipment ID Number: CE926

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 926A1

Emission Unit Description: 10-Ton Fly Ash Silo (MSI)

Raw Material/Fuel: Fly Ash

Rated Capacity: 30 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 01-A-457-S2
567 IAC 23.3(2)"d"

Pollutant: Federal Particulate Matter (PM)

Emission Limit(s): 0.02 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 01-A-457-S2

Pollutant: State Particulate Matter (PM)

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 01-A-457-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work Practice Standards:

1. The fabric filter dust collector shall be operated and maintained according to manufacturer's specifications.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Record all inspections and maintenance to the fabric filter dust collector.

Authority for Requirement: Iowa DNR Construction Permit 01-A-457-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 13

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 2,400

Stack Temperature (°F): Ambient (68 °F)

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-457-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (Federal)

Stack Test to be Completed by ^(*) – 90 days after the issuance of IDNR Construction Permit 01-A-457-S2 which was issued on July 29, 2003.

Test Method – 40 CFR 60, Appendix A, Method 5 or approved alternate method

Authority for Requirement – Iowa DNR Construction Permit 01-A-457-S2

Pollutant – Particulate Matter (State)

Stack Test to be Completed by ^(*) – 90 days after the issuance of IDNR Construction Permit 01-A-457-S2 which was issued on July 29, 2003.

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – Iowa DNR Construction Permit 01-A-457-S2

^(*) Per Department's November 26, 2003 letter, the stack testing date is deferred until such time as a decision is made concerning the future use or replacement of this equipment. This deferral is made with the understanding that this equipment will not be used until such time as it is either replaced or it is determined to use the existing equipment. If the equipment is used at any time, the required stack testing must be completed within 60 days of the initiation of operation.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 927**Associated Equipment**

Associated Emission Unit ID Numbers: 927

Emission Units vented through this Emission Point: 927

Emission Unit Description: Portable Diesel Tank (MSI) – Breathing Loss & Working Loss

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 300 Gallon Tank

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (25%) will required the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 01-A-458
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-458
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): NA

Stack Diameter (inches): NA

Stack Exhaust Flow Rate (scfm): NA

Stack Temperature (°F): NA

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 01-A-458

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 928A**Associated Equipment**

Associated Emission Unit ID Numbers: 928A

Emission Units vented through this Emission Point: 928A

Emission Unit Description: Fly Ash Vacuum Pump Diesel Exhaust (MSI)

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 5 Gallons/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 928B**Associated Equipment**

Associated Emission Unit ID Numbers: 928B

Emission Units vented through this Emission Point: 928B

Emission Unit Description: Fly Ash Blower Diesel Exhaust (MSI)

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 2 Gallons/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 928C**Associated Equipment**

Associated Emission Unit ID Numbers: 928C

Emission Units vented through this Emission Point: 928C

Emission Unit Description: Portable Generator Diesel Exhaust (MSI)

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 3 Gallons/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 929**Associated Equipment**

Associated Emission Unit ID Numbers: 924 and 926B

Emissions Control Equipment ID Number: CE929

Control Equipment Description: Fabric Filter Dust Collector

Emission Units vented through this Emission Point: 924

Emission Unit Description: Dry Fly Ash Truck

Raw Material/Fuel: Fly Ash

Rated Capacity: 100 Ton/hr

Emission Units vented through this Emission Point: 926B

Emission Unit Description: 150-Ton Fly Ash Silo (MSI)

Raw Material/Fuel: Fly Ash

Rated Capacity: 30 Ton

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 03-A-733
567 IAC 23.3(2)"d"

Pollutant: Federal Particulate Matter (PM)

Emission Limit(s): 0.02 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 03-A-733

Pollutant: State Particulate Matter (PM)

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 03-A-733
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work Practice Standards:

1. The fabric filter dust collector shall be operated and maintained according to manufacturer's specifications.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Record all inspections and maintenance to the fabric filter dust collector.

Authority for Requirement: Iowa DNR Construction Permit 03-A-733

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 12

Stack Opening (inches): 9" × 10"

Stack Exhaust Flow Rate (scfm): 1,800

Stack Temperature (°F): Ambient (68 °F)

Discharge Style: Horizontal Discharge

Authority for Requirement: Iowa DNR Construction Permit 03-A-733

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (Federal)

Stack Test to be Completed by ^(*) – 90 days after the issuance of IDNR Construction Permit 03-A-733 which was issued on July 29, 2003.

Test Method – 40 CFR 60, Appendix A, Method 5 or approved alternate method

Authority for Requirement – Iowa DNR Construction Permit 03-A-733

Pollutant – Particulate Matter (State)

Stack Test to be Completed by ^(*) – 90 days after the issuance of IDNR Construction Permit 03-A-733 which was issued on July 29, 2003.

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – Iowa DNR Construction Permit 03-A-733

^(*) Per Department's November 26, 2003 letter, the stack testing date is deferred until such time as a decision is made concerning the future use or replacement of this equipment. This deferral is made with the understanding that this equipment will not be used until such time as it is either replaced or it is determined to use the existing equipment. If the equipment is used at any time, the required stack testing must be completed within 60 days of the initiation of operation.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 990**Associated Equipment**

Associated Emission Unit ID Number: 990

Emissions Control Equipment ID Number: CE990

Control Equipment Description: Fabric Filter Dust Collector

Emission Unit vented through this Emission Point: 990

Emission Unit Description: Hydrated Lime Storage Silo

Raw Material/Fuel: Lime

Rated Capacity: 15 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 991 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Number: 991

Emission Unit vented through this Emission Point: 991
Emission Unit Description: Hydrated Lime Mixing Tank
Raw Material/Fuel: Lime
Rated Capacity: 0.075 Ton/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 9060 (Fugitive)**Associated Equipment**

Associated Emission Unit ID Numbers: 9060, 9061 and 9062

Emission Units vented through this Emission Point: 9060

Emission Unit Description: Stick Welding, 14 Welders

Raw Material/Fuel: Welding Electrodes

Rated Capacity: 5 lb/hr each

Emission Units vented through this Emission Point: 9061

Emission Unit Description: MIG Welding, 4 Welders

Raw Material/Fuel: Welding Electrodes

Rated Capacity: 1 lb/hr each

Emission Units vented through this Emission Point: 9062

Emission Unit Description: TIG Welding, 2 Welders

Raw Material/Fuel: Welding Electrodes

Rated Capacity: 0.5 lb/hr each

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7890**Associated Equipment**

Associated Emission Unit ID Numbers: 7890

Emission Units vented through this Emission Point: 7890

Emission Unit Description: Portable Equipment Gasoline Engines (12 Engines)

Raw Material/Fuel: Unleaded Gasoline

Rated Capacity: 4.833 Gallons/hr Total

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7892**Associated Equipment**

Associated Emission Unit ID Numbers: 7892

Emission Units vented through this Emission Point: 7892

Emission Unit Description: Portable Equipment Diesel Engines

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 4 Gallons/hr

Applicable Requirements**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the

identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance

records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing

emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.

- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act.
 - e. The changes comply with all applicable requirements.
 - f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification

procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.105(1)"a"(4)

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the

owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated

pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing

protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, Iowa 52353-1623
(319) 653-2135

Polk County Planning & Development

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A: DNR Air Quality Policy 3-b-08 (Opacity Limits)

1998 NOV 13 4

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

POLICY/PROCEDURE STATEMENT

TOPIC: <u>Opacity Limits</u>

Policy Procedure Number: 3-b-08

Replaces Number: None

Date:

Effective Date: November 12, 1998

Preparer: David Phelps

Reviewer:

Approval: **Bureau Chief:** Peter Hamlin

Date: 11/12/98

Division Administrator: Allan Stokes

Date: 11/12/98

Applicable Code of Iowa or Iowa Administrative Code Rule: 23.3(2)d

“No person shall allow, cause or permit the emission of visible air contaminants into the atmosphere from any equipment, internal combustion engine, premise fire, open fire or stack, equal to or in excess of 40 percent opacity or that level specified in a construction permit, except as provided below and in 567-Chapter 24.”

REASON OR BACKGROUND

The default opacity limit allowed by regulation is 40%. This limit was established with the original regulations in 1970. It is generally accepted that opacity greater than 40% was evidence of a mass emission standard exceedence. More recently, there have been requests from facilities for limits much lower than that allowed by the regulations, in some cases less than 0.01 gr/scf to which a 40% opacity limit does not correspond. Since opacity is used as an indicator of the particulate emission rate, listing an indicated potential problem opacity that is more in line with the mass emission rate is useful. In order to have the authority to set limits lower than 40%, subrule 23.3(2)d was changed. This change allows the department the ability to set opacity limits at a level that more closely corresponds to what would be observed by the source when operating in compliance with its mass emission rate.

Except in the case where a specific opacity limit is established by rule, it has been the general policy of the Department not to take action on opacity limits directly. Rather, if it is felt that a violation of the mass emission rate exists that is not attributable to some abnormal event, a stack test would be required to verify compliance. However, the Department reserves the right to use the results of formal opacity readings as evidence of an exceedence.

DETAILS

It shall be the policy of the Department to list the default opacity as a permit condition and in addition an indicator opacity may be listed.

For ease of proving continual compliance a source may request a 'no visible emissions' opacity limit which allows proof of compliance without having a certified opacity reading taken. In this case any visible emissions would be an exceedence.

The IDNR permit writer may list an opacity that will be a indicator of possible mass emission rate exceedence. If the permittee wishes, the recommended indicator opacity may be changed by demonstrating compliance with the mass emission rate during a stack test while emitting the new desired indicator opacity. If the tested mass emission rate is less than the permitted emission rate, then the desired indicator opacity may be set at a proportionally higher level than observed during the stack test.

If an opacity measurement, taken in accordance with an approved reference method for opacity, (generally USEPA Method 9 or 22) exceeds the indicator opacity then the facility will promptly investigate the source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require additional proof to demonstrate compliance with the mass emissions limits.

Recommended indicator opacities shall be:

Grain Loading gr./scf	Recommended Indicator Opacity
<0.01 gr./scf	non specified in permit *
0.01 to 0.06 gr./scf	10% Opacity
0.061 to 0.08 gr./scf	20% Opacity
0.081 to 0.1 gr./scf	25% Opacity

* A line is added to the permit that states: "If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard."

If a source is a batch process the indicator opacity shall be based on the table above, but the opacity averaging period, for comparison to the indicator opacity, shall be the entire batch cycle. For purposes of comparison the indicator opacity readings shall be taken during the entire cycle and averaged.

Sources are also given the opportunity to set source specific limits to be coordinated with the initial compliance test. These may then be incorporated into the permit.

In all cases an exceedence of the indicator opacity will require the permittee to file an "indicator opacity exceedence report" to the IDNR regional office. The reporting requirements shall be:

Oral report of excess indicator opacity. An incident of excess indicator opacity (other than an incident of excess indicator opacity during a period of startup, shutdown, or cleaning) shall be reported to the appropriate regional office of the department within eight hours of, or at the start of the first working day following the onset of the of the incident. The reporting exemption for an incident of excess indicator opacity during startup and shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in subrule 25.1(6).

An oral report of excess indicator opacity is not required for a source with operational continuous monitoring equipment (as specified in subrule 25.1(1) if the incident of excess indicator opacity continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity.

The oral report may be made in person or by telephone and shall include as a minimum the following:

- a) The identity of the equipment or source operation from which the excess indicator opacity originated and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and expected duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps being taken to remedy the excess indicator opacity.
- f) The steps being taken to limit the excess indicator opacity in the interim period.

Written report of excess indicator opacity. A written report of an incident of excess indicator opacity shall be submitted as a follow-up to all required oral reports to the department within seven (7) days of the onset of the upset condition, and shall include as a minimum the following:

- a) The identity of the equipment or source operation point from which the excess emission originate and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps that were taken to remedy and to prevent the recurrence of the incident of excess indicator opacity.
- f) The steps that were taken to limit the excess indicator opacity.
- g) If the owner claims that the excess indicator opacity was due to malfunction, documentation to support this claim.

Exceptions to this policy:

- 1) In the case where a facility has an opacity limit established in an existing permit, no change will be made to that permit limit unless the permit is being modified for other purposes.
- 2) If the facility has a continuous opacity monitor, this policy shall not apply.
- 3) This policy shall not apply to opacity limits established in Prevention of Significant Deterioration (PSD) permits or permits that were established for maintenance plans for nonattainment areas.
- 4) This policy shall not apply where an opacity limit is established as an indication of hazardous air pollutants.

- 5) This policy shall not apply where an opacity limit is established by a rule, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), etc.

VI. Appendix B: Acid Rain Phase II Permit



AIR QUALITY BUREAU
7900 Hickman Rd, Suite 1
Urbandale, IA 50322

Phase II Acid Rain Permit

Issued to: Muscatine
Operated by: Muscatine Power and Water
ORIS code: 1167
Effective: February 3, 2004 through February 2, 2009

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Operating Permits Section

Date

Acid Rain Permit comprises the following:

- 1) Statement of Basis.
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source, as corrected by the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Iowa Code paragraph 455B.133[8"a"], and Titles IV and V of the Clean Air Act, the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section issues this permit pursuant to 567 Iowa Administrative Code (IAC) 22.135(455B) to 22.145(455B) and 567 IAC 22.100(455B) to 22.116(455B). The compliance options are approved as proposed in the attached application.

2) SO₂ Allowance Allocations and NO_x Requirements for each affected unit

		2004	2005	2006	2007	2008	2009
Unit 8	SO ₂ allowances, under Table 2 of 40 CFR part 73.	1362*	1362*	1362*	1362*	1362*	1362*

		2004	2005	2006	2007	2008	2009
Unit 9	SO ₂ allowances, under Table 2 of 40 CFR part 73.	2026*	2026*	2026*	2026*	2026*	2026*
	NO _x limit	<p>Pursuant to 40 CFR part 76, The Iowa Department of Natural Resources approves a standard emission limitation compliance plan for Unit 9. The NO_x compliance plan is effective beginning February 3, 2004 through February 2, 2009. Under the NO_x compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(1), which is 0.40 lbs/mmBtu for tangentially fired units.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and the requirements covering excess emissions.</p>					

* The number of allowances allocated to Phase II affected units by U.S. EPA in 40 CFR part 73 Table 2 (Revised September 28, 1998). In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

3) Comments, Notes and Justifications:

Renewal of the Phase II SO₂ and NO_x permit.

4) Permit Application: Attached.



Acid Rain Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: ☐ New ☐ Revised ☒ Renewal

STEP 1

Identify the source by
plant name, State, and
ORIS code.

Plant Name	Muscatine	State	IA	ORIS Code	1167
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STEP 2

Enter the unit ID#
for every affected
unit at the affected
source in column "a."
For new units, enter the
requested information in
columns "c" and "d."

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
8	Yes		
9	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Plant Name (from Step 1) Muscatine

STEP 3**Read the
standard
requirements****Permit Requirements**

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**STEP 3,
Cont'd.**

Nitrogen Oxides Requirements The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Plant Name (from Step 1)	Muscatine
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Step 3,
Cont'd.

Liability, Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the
certification
statement,
sign, and
date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Donald G. Pauken Manager Environmental Affairs Alternate Designated Representative	
Signature	<i>Donald G. Pauken</i>	Date <i>6/10/02</i>